A BANTAM SEVENTY-FIVE ★ S3071 ★ 75¢

EDWARD H. FR[illegible]DMAN

How To Draw

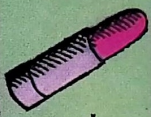
if you can write, you can draw!!

If you can write the number 1100 you can "draw" a cylinder

and a tomato can

and a cigarette

and a lipstick



and thousands of other objects!

Here is a revolutionary new book that will teach you how to make fine, recognizable drawings of buildings, furniture, cars, people, animals, birds, and countless other things as easily as you sign your own name.

ANYONE WHO CAN WRITE
NUMBERS AND LETTERS CAN
BEGIN TO DRAW
IMMEDIATELY!

You can begin to "write" clear, simple pictures instantly, the minute you open this amazing book.

HOW TO DRAW will not necessarily teach you how to be a great artist, cartoonist, or illustrator.

But it WILL enable you to make practical, recognizable drawings, even if you have no artistic talent whatsoever!

You do NOT need to learn any special skills—you use the same marks you make in writing.

HOW TO DRAW tells you how to analyze your subject and *become aware of its form,* then "write a picture of it"—as easily as you write your own name!

A ten minute trial will convince you—
HOW TO DRAW
is a revolutionary advance in art instruction!

HOW TO DRAW

by

EDWARD H. FREEDMAN

BANTAM BOOKS
TORONTO · NEW YORK · LONDON

DEDICATED
to
MOTHER
and DAD

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PREFACE

About fifteen years ago I met a man who was having trouble communicating to others a mental image of what he had to offer in the way of furniture to decorate a bedroom. Pictures of the modern pieces weren't available and his verbal descriptions were simply not being conveyed to his client.

Like many before him in similar circumstances he groaned, "Oh, if I could only draw!" I had heard that sentence many times but for some reason this was the drop in the bucket that caused it to overflow. Right then I decided that here was a real challenge. The man in question had been to college, could read and write, do simple arithmetic, but he couldn't make a simple drawing of a piece of furniture, not even a rough sketch to support his verbal description.

Years have passed since that incident and I bear the scars of my own struggle with the problem of reducing drawing to a simple subject, divorced from art and available to everyone, and of raising drawing to its rightful place in the field of visual communication. To do so it seemed necessary to prove that drawing had a greater affinity to writing than to art. Any tool is useful if its purpose is understood and significant benefits are derived from its use. The following method of drawing is just such a tool.

This book sets out to give the average individual, with or without artistic talent, the ability to draw as easily as he writes. Everyone who writes can enjoy the fun of writing pictures. Drawing helps to give fuller expression of ideas and greater dimension to creative thinking. Drawing is, in fact, picture-making on a conversational level.

E. H. F.

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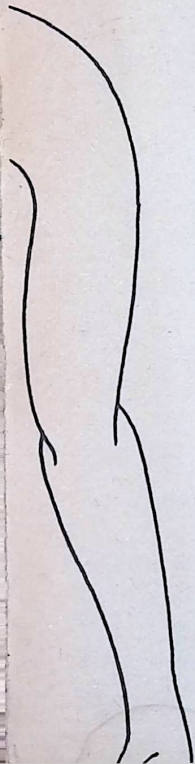


PICTURE-WRITING

"From his pouch he took his colors,
Took his paints of different colors,
On the smooth bark of a birch-tree
Painted many shapes and figures,
Wonderful and mystic figures,
And each figure had a meaning,
Each some word or thought suggested."

from THE SONG OF HIAWATHA
by Henry Wadsworth Longfellow

INTRODUCTION:

My subject is "drawing"—conversational drawing, which is sometimes called picture-writing. It is a basic, functional kind of descriptive drawing, and a must in visual communication.

What is your experience with "drawing"? The odds are that you can't even draw a straight line. You are convinced that you have *no* talent—*no* artistic ability—and therefore can't draw. This book will show you that you *can* draw, yes, even straight lines, and will prove that you are by no means a hopeless case.

I said that this type of drawing is visual communication. What does that mean? Simply this. When you take a pencil from your pocket to sketch an object, even crudely, you are making a drawing to transmit an image, to help communicate a picture. You have no intention of producing a work of art. When you make a rough sketch with pen or pencil to entertain a child, you are creating a drawing which is not a work of art. And there are numberless other instances in everyday life, such as trips to the hardware store for fasteners or hinges, when drawings help you to get exactly the right gadget, and all these drawings are greatly removed from art. "Well," you may ask, "how does that help me? How does that make me able to produce a drawing?"

It's simple. Can you write? Can you make certain marks with a pencil and put those marks together to make numbers and letters? That is the definition of "drawing"—a pulling and pushing motion of the hand which, when holding a pencil or pen, and moving it across a piece of paper, makes a mark on that paper. Such marks are drawings.

If you have learned to make marks representing numbers and letters, you can also learn to make marks which

form cylinders and boxes. Most objects in the physical world, certainly those you are likely to have contact with, have shapes based on cylinders and boxes. Boxes and cylinders are the fundamental forms. You should be able to draw a cylinder and box. If you can't, it's only because you really don't know what they look like. You may not be completely aware of their shape. But when you have finished the instructions in this book, you'll be able to draw cylinders and boxes with the greatest of ease. As a result, nothing in the world will be beyond your ability to describe with a picture of your own making.

The method used can be compared with the present-day methods of teaching languages. You learn to talk the language before you struggle with grammar. Here, you learn to draw by developing your awareness of form. No artistic talent is required, and the fact is that your instruction in this method should have begun when you were about four years old.

You often hear it said that a new-born child's brain is like a blank photographic negative on which impressions are made when the lens is opened. With each passing day the new-born child's brain receives impressions of objects that pass before its eyes. These impressions are flat images and remain that way except that from time to time more surface detail is added.

When a child is old enough to make a mark with a crayon, he is usually imitating a parent or nurse who has demonstrated what crayons are for. But as soon as the child has a will of his own he tries to make images of certain things with the crayons. These images have no perspective. They are flat contours of a house, a glass, a cat, or anything

else the child may have seen.

When the child goes to kindergarten, these flat impressions are reinforced in teaching him to use a pair of scissors to cut colored papers with, in giving him outlines to fill in, finger painting; but all these exercises are intended to develop the child's appreciation of art, not his ability to draw. The idea of kindling the child's awareness of form, of depth or third dimension, is considered unimportant and therefore neglected.

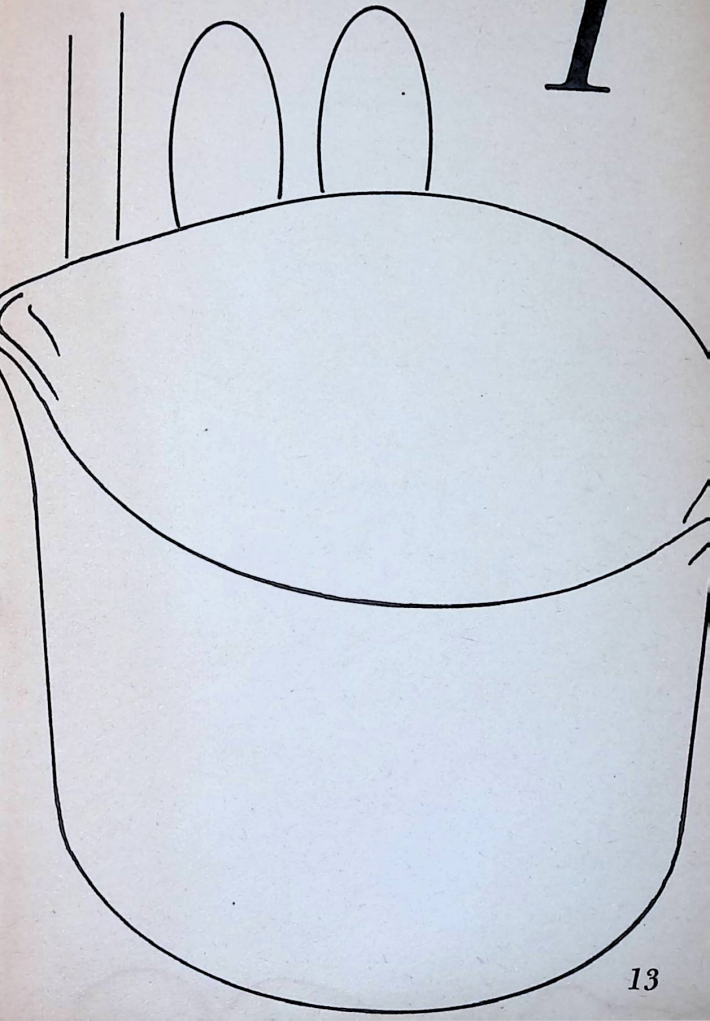
A few years later the child is old enough to begin to learn elementary drawing, where perspective is, so to speak, the basic grammar. But the child then finds it hard to learn perspective, because perspective is very difficult for anyone who has not learned to appreciate awareness of form. Hence, most children are considered poor or completely lacking in artistic talent. Not passing this "minor" subject is unimportant, for it is not one of the "musts" for a diploma. What is *not* understood is that the child is left totally unaware of form—an essential factor in creative thinking. The vast majority of people are therefore considered without artistic talent and unable to draw, which is perhaps one of the reasons why we have so few artists.

The responsibility for this situation rests with our schools. Children should be taught awareness of form as soon as they are given crayons. When you have an idea of what to write about, you can write. When you are aware of the form of an object you wish to illustrate, *you can draw*.

Fortunately, it is never too late for people to learn this fascinating method which, in a matter of weeks, proves that they *can* learn to draw. Try it on yourself and see! A new thrill and pleasure will be yours. And a new skill.

PROOF THAT YOU CAN DRAW!

1



RIGHT NOW

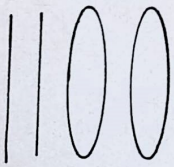
YOU ARE SURE–

- *you can't draw!*
- *you don't know how to draw!*
- *you can't even draw a straight line!*

AND RIGHT NOW

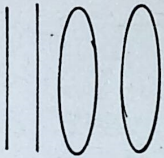
YOU ARE SURE

- *you can write*
- *you know how to write*
- *you can write 1100*

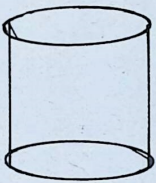


Well, if you don't already know it,
the following statement is true:—

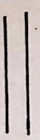
—IF YOU CAN *write* 1100



—YOU CAN *write* A CYLINDER

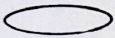


because —

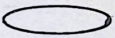
THAT NUMBER 1100 HAS
TWO "ONES"  AND TWO
ZEROS

Now—

if you *write* the two zeros

this way— 

one over the other

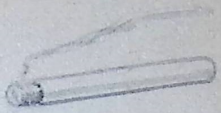


...d join them with two "ones"—

this way—

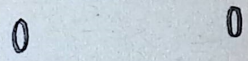
you *write* a cylinder.

YOU CAN WRITE THIS CIGARETTE—

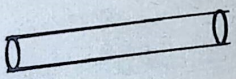


—but first become **AWARE OF ITS FORM**
—It's a long CYLINDER lying down.

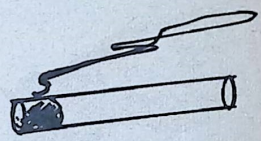
Begin by *writing*
two zeros far apart



join them with two "ones"
like this



add the ashes and smoke.



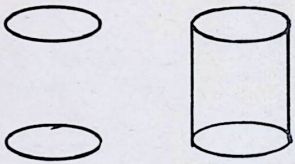
Sure it's easy . . . now that you know the secret!

HERE'S A CAN OF FOOD—

First, become **AWARE OF ITS FORM.**

It's a simple CYLINDER
which is taller than it is wide.

Begin by writing two zeros, one over the other, far enough apart to get the proper height—then join them together with two "ones."



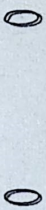
Write in the details. Put in the top and bottom rims which are indicated by double lines. Roughly indicate the label. These are the features that describe the object.

Try some canned goods at home.
Watch the CYLINDER proportions.

TRY THIS LIPSTICK—

First become **AWARE OF ITS FORM**
—It's a simple CYLINDER, tall and narrow.

Write two zeros far enough apart to make a tall cylinder. Join them with two long "ones."

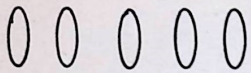


Divide the cylinder with a horizontal zero where the metal case begins. Shape the top by making it taper to a rounded tip. Add a double line at the base.

Then add a little shading which will give life to your sketch.

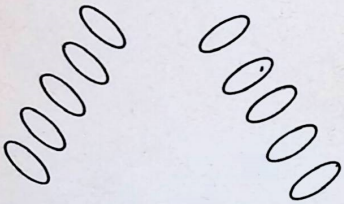
Since all cylindrical objects are involved with zeros, it is best to practice making zeros of different sizes and proportions. Write them easily and quickly swinging your hand freely from the wrist. Do not tighten up. Relax!

write a row of vertical zeros—

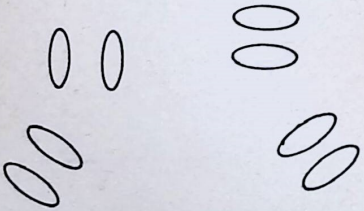


and a column of horizontal zeros—

then some slanted—uphill and downhill—

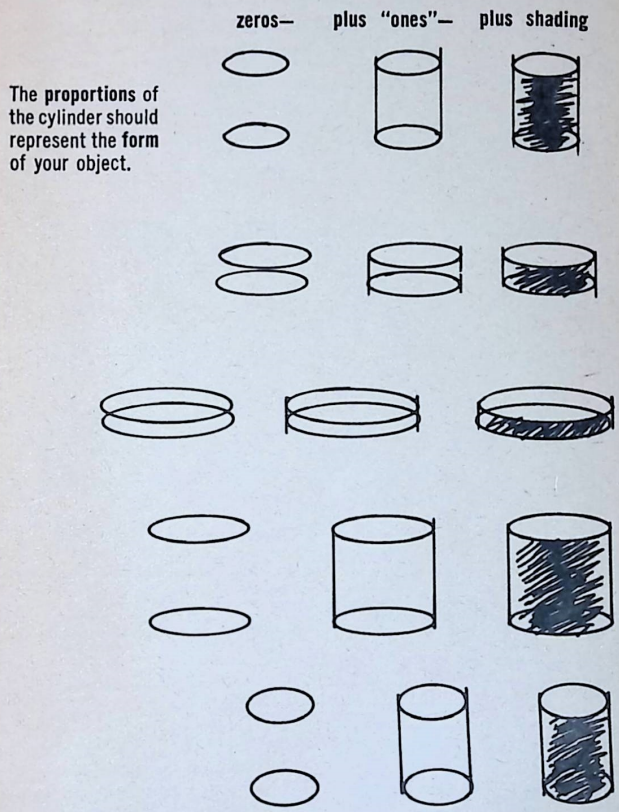


and then in pairs, like this—



For more exercises see pages 106-107.

Seeking out the CYLINDERS in rounded objects develops your keen sense of AWARENESS OF FORM. Writing the cylinders must get to be as easy as writing your name. Practice this writing procedure during your spare moments.



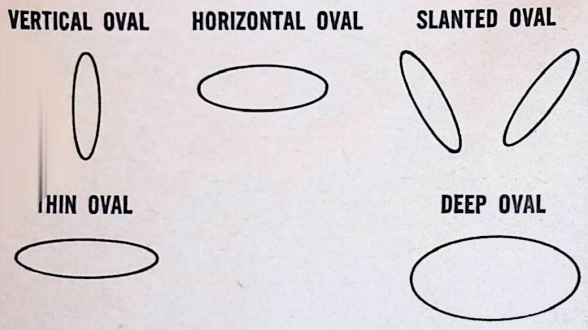
TERMINOLOGY

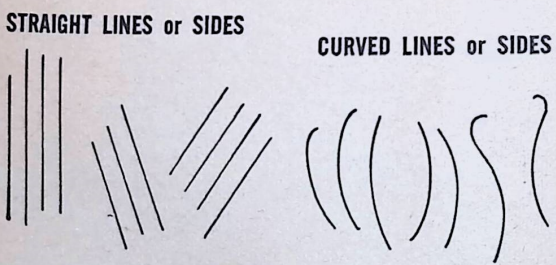
In arithmetic we have the zero which we write. In drawing we have the oval which we draw.

They are identical twins, and
they are made in the same way,
with one swirl of the pencil.

"Ones" and straight lines are
identical twins. They are made
with one stroke of a pencil.

Since we are making pictures we shall, from here on, use the terms "drawing," "ovals" and "straight lines." But always bear in mind that it is the same, that drawing is the same as writing.





OBJECTS FROM CYLINDERS

2

WRITING PICTURES

Anyone who can write words can write a picture. You need only two abilities:

A. You must be able to write.

B. You must have AWARENESS of form.

It is impossible to write a message without having a thought. And it is impossible to write a picture without having a mental awareness of the form of an object. Even when the object is directly before you, you must observe and become AWARE of its general form. You will find that its form is based either on a *cylinder* or a *box*.

Both cylinders and boxes can be written with curved and/or straight lines, plus ovals where cylinders are concerned. Analyzing the proportions of the cylinders or boxes in various objects produces the mental impressions which make writing pictures possible. A practical exercise, and one most easily practiced, is to analyze the pictures that appear in newspapers and magazines. Writing over the pictures printed and defining the basic cylinder or box from

which the object is shaped for just a few minutes a day will speed your progress in picture-writing.

This exercise makes analyzing objects simple. It makes it possible for you to draw any object, real or imaginary. Searching for an object's form is no different from searching for a thought you wish to put into words.

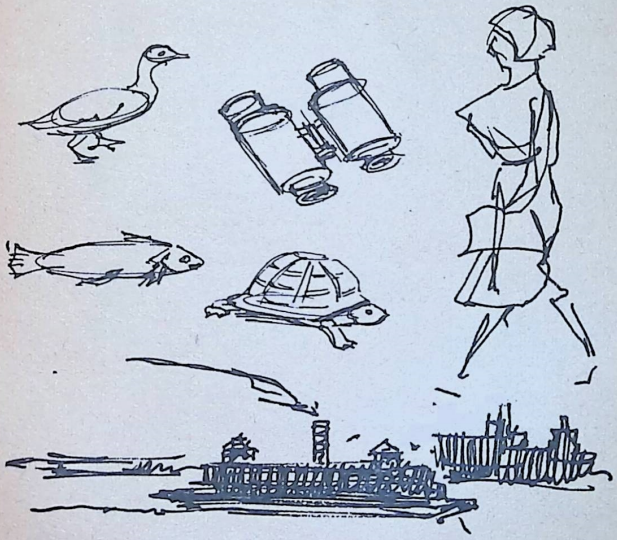
To write a word, you join letters.

To write a sentence, you join words.

To write numbers, you join numerals.

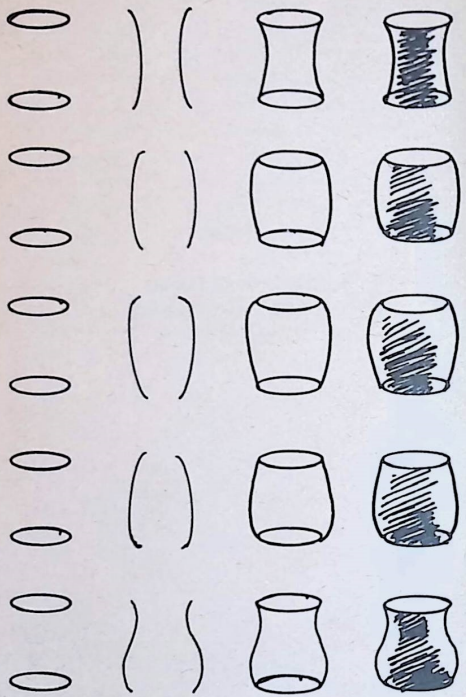
To write a picture you join certain lines together just as you did when drawing a cylinder, a can of food, or a lipstick. Those are simple objects, but even the most complex object is only a combination of the two basic forms in various sizes.

Your written picture may not be up to artistic standards, but it will certainly describe the object you have in mind.



This page describes the simple combination of ovals and curves that make many common objects. There are countless more that exist in the average home, in vases, lamps, brackets and furniture.

Draw five sets of same-size ovals, and join the ovals in each set with different curved lines.

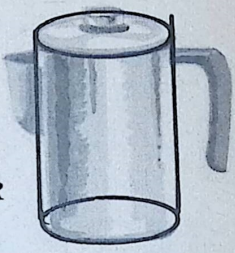


This group adds to the list of objects you can draw. You can greatly increase the list by making the top and bottom ovals of different sizes.

What to look for in an object to develop AWARENESS OF FORM

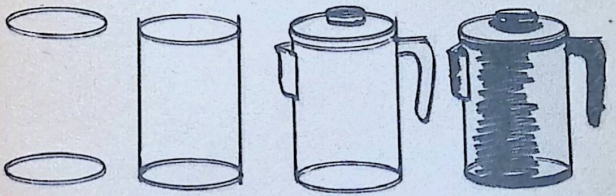
Objects may be classified as either simple or complex. A can of food is a simple cylinder with no additional minor features. A coffee pot is a complex article. It has a cylinder for a body, and fastened to it are a spout, a handle and a cover. All complex objects consist of a major body with minor attachments. In a teapot, it's the bowl; in a lamp, it's the base; in a tree, it's the trunk; in the human figure, it's the torso.

To analyze a complex object, the first necessity is to determine whether its body is cylindrical or rectangular. Here is a coffee pot.



First become **AWARE OF ITS FORM** *—the major unit is a CYLINDER taller than wide.*

Begin by drawing two ovals far enough apart. Join them together with two straight lines.

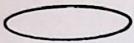


Add the features and some shading.

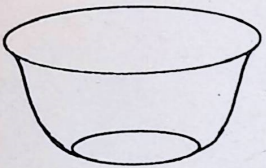
First become **AWARE OF ITS FORM**

—a bowl which is wider than deep, with a slight reverse curve for sides.

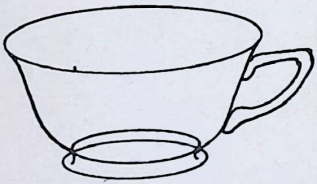
Draw the two ovals—



join the ovals with curved sides—



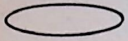
add the ear and pedestal—



add the shading.

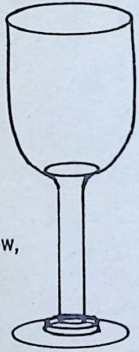
First become **AWARE OF ITS FORM**
—a deep bowl with long curved sides.

Draw the two ovals, far apart and centered over each other—



add the sides—

add the bottom oval far below, and sides of the stem—



add the oval for the base—

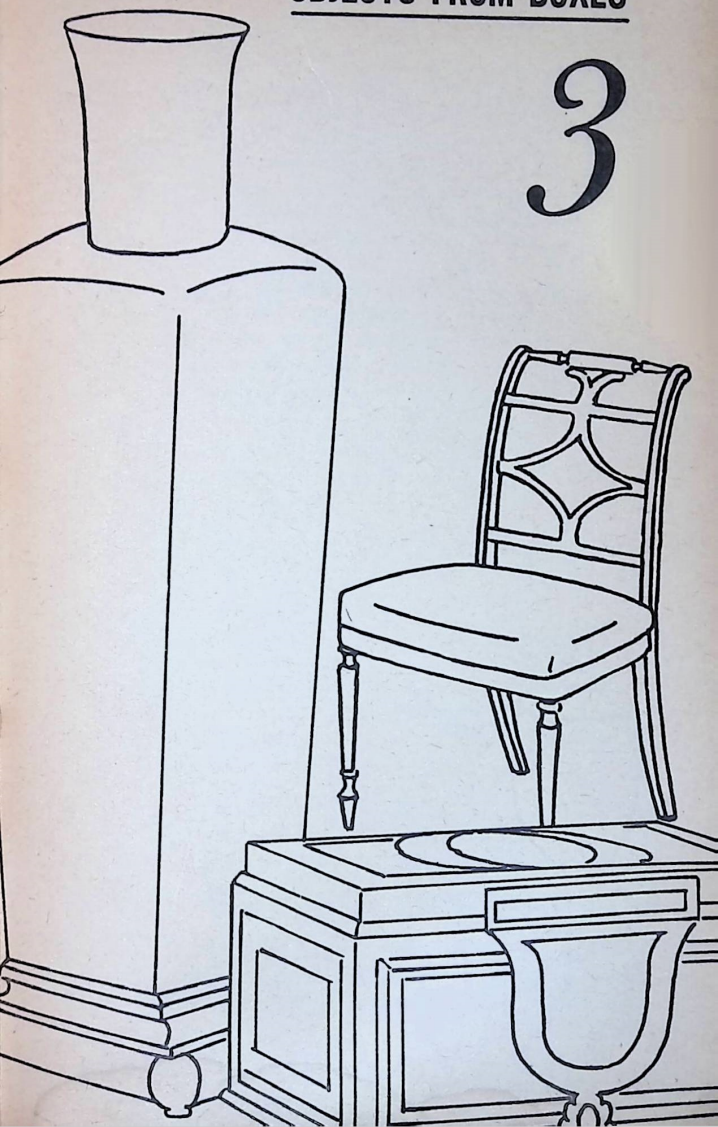
add the shading.

This is the first exercise in which pictures from newspapers and magazines will be used to develop your awareness of form. For this exercise choose only pictures of cylindrical objects. Search the picture for as many cylinders as you can find, and outline each of them. At this point it is not advisable to draw the rest of the object. Concentrate on finding and outlining the cylinders.

The picture below is an example of a satisfactory subject and the type of treatment you should give it with any available pen or pencil.

OBJECTS FROM BOXES

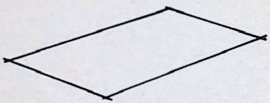
3



Those objects not based on CYLINDERS are based on RECTANGULAR boxes.

Cigar box, jewel box, file box, are all examples of the simplest form of box. The proportions vary, and the features on each distinguish one from the other. Other complex objects, such as automobiles, cameras, furniture, buildings, etc., are also based on a box—a major box upon which the minor parts or features are assembled.

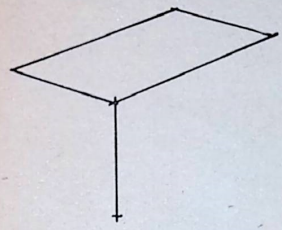
A glance at a rectangular object should make you aware of its basic form—a rectangular box of certain characteristic proportions. This is your starting point. You must learn to draw the simple box. We are engaged in the medium of a communication. You are the sender, and there will be a receiver. The box must show a top, front and one side in order to convey its fullest description.

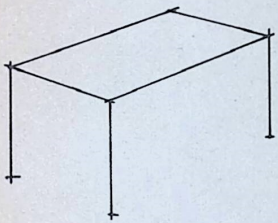


Start with the top of the box—it's a rectangle which determines the width and depth of the box.

The lines which form the opposite sides of the rectangle are approximately parallel. These straight lines should be as easily drawn as you write "ones"—without hesitation. Do the longer lines first, and then cross them with the two shorter lines. Do them quickly so that your lines will look firm. The lines in each set should be of equal length, respectively.

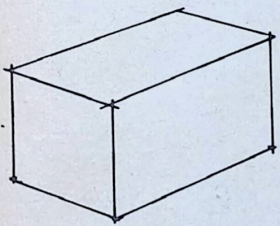
The next point to develop is the height of the box. This is determined by drawing a straight line, down, at the front corner, the one converging toward you. Make a mark on this line which will determine the desired height of the box. Bear in mind that in this lesson you are drawing the box from the top down.

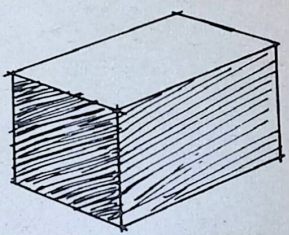




Then draw similar lines of the same length at the left and right corners.

To complete the box, join the ends of the straight lines, and add some light tone on the front, and a darker tone on the side, leaving the top white.



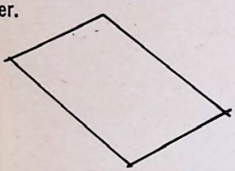


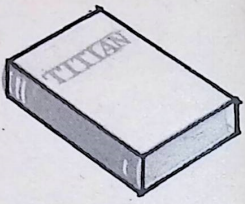
Practice this lesson at great length until you are able to draw a box as easily as you write the word "box." See pages 108-111.

Everybody knows what a book looks like. When the book reminds you of a box, the book becomes easy to draw.

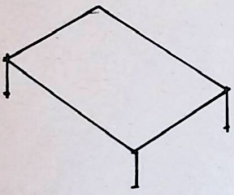
First become **AWARE OF ITS FORM**
—a shallow BOX, longer than it is wide.

Draw the top rectangle—two sets of parallel lines crossing each other.

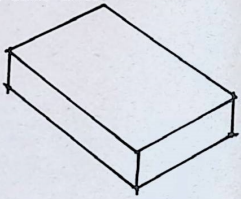




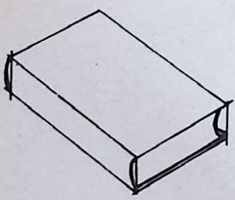
Downward from the three corners, draw lines of the same length which will determine the height of the box.



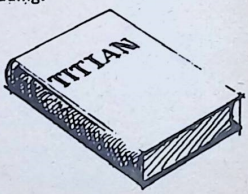
Join the ends of these lines with straight lines. This will complete the sides and finish the box at the same time.



Draw the features—the curvature of the binding and pages, and double line for the cover.



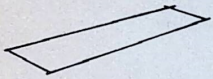
Indicate a title and add some shading.



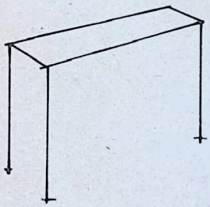
The identifying features of this valise are its handles and fastenings.

First become **AWARE OF ITS FORM**
—a BOX, slightly longer than tall and not very deep.

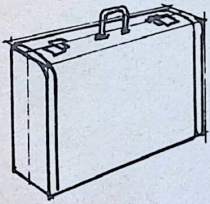
Draw the top rectangle—two sets of parallel lines crossing each other.

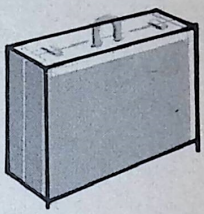


Downward from the three corners, draw lines of the same length which will determine the height of the box.

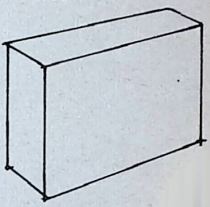


Draw the features—the handle, locks and reinforced ends.

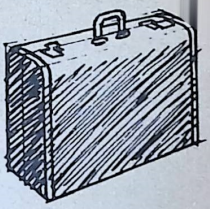




Join the ends of these lines with straight lines. This will complete the sides and finish the box at the same time.



Add some shading.

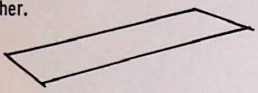


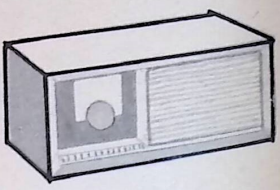
The knob, the grill and the dial convert this box into a radio.

First become **AWARE OF ITS FORM**

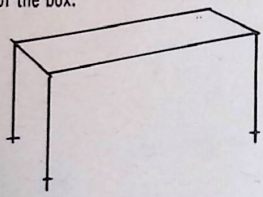
—A horizontal BOX, longer than high.

Draw the top rectangle—two sets of parallel lines crossing each other.

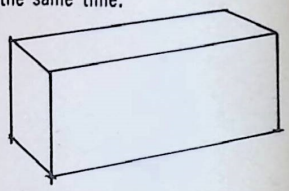




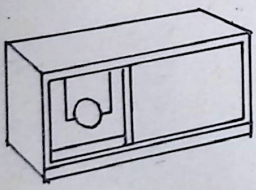
Downward from the three corners, draw lines of the same length which will determine the height of the box.



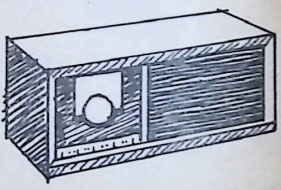
Join the ends of these lines with straight lines. This will complete the sides and finish the box at the same time.



Draw the features—the knob, dial, grill, etc.



Add the shading.

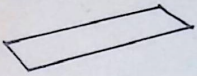


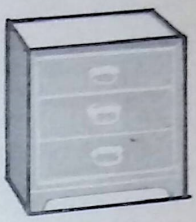
The outline of the three drawers and the drawer handles immediately produces the image of the chest of drawers.

First become **AWARE OF ITS FORM**

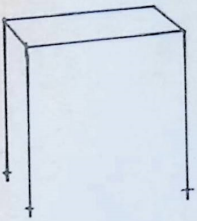
—A shallow BOX with an almost square front.

Draw the top rectangle—two sets of parallel lines crossing each other.

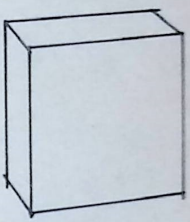




Downward from the three corners, draw lines of the same length which will determine the height of the box.

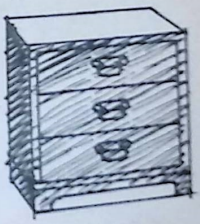


Join the ends of these lines with straight lines. This will complete the sides and finish the box at the same time.



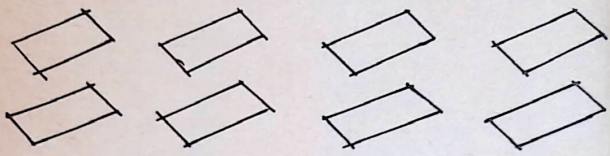
Draw the features—the drawers, handles and base.

Add the shading.

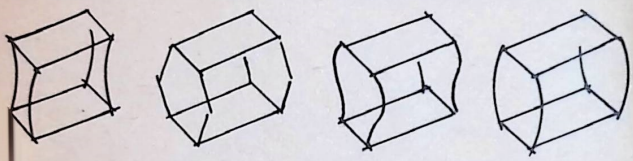


The simple box consists of top and bottom rectangles alike in size and joined by straight lines. Featured below are four sets of rectangles, the sets all the same size, but each set joined by a different style of line.

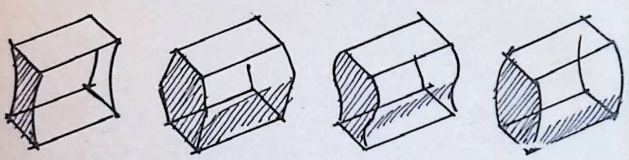
Draw four sets of like-sized rectangles, the rectangles of each set placed directly one over the other.



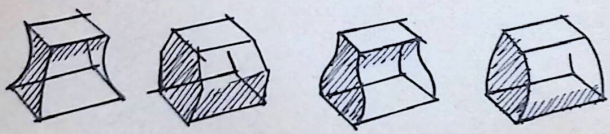
Connect each set of rectangles with a different character of line.



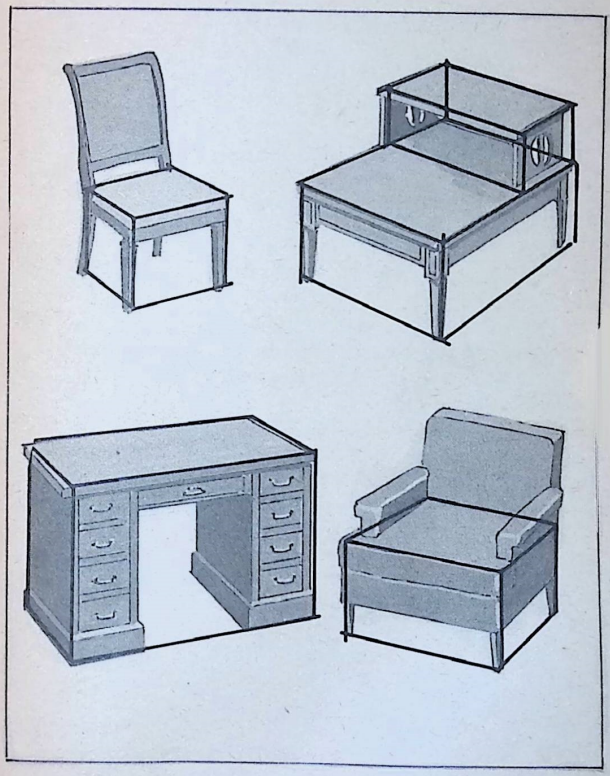
Add some shading to help avoid optical illusions.



Many interesting variations may be created by using rectangles of unequal sizes in each set. Rectangles must be centered one over the other. A few examples are shown below.



The pictures below are examples of box-shaped objects which may be found in newspapers and magazines and used for drawing practice. Rectangular objects are based on box shapes. Find those boxes, outline them, and you become aware of their form, their proportions. From match boxes to bridges, countless different items are based on the shape of a box.



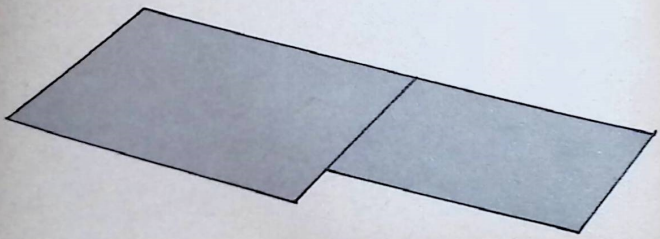
PLANNING THE DRAWING OF A HOUSE

The following pages, 40 through 63, should be given special attention because they cover almost every problem of drawing found in a rectangular object—how to attach one part to another—how to draw a cluster of objects—when to make use of boxes and cylinders as helpful guides—how to find the center of any wall—how to draw a roof, a gable, a gable window.

1

First become **AWARE OF ITS FORM**
—it's two attached BOXES,
one large, the other small.

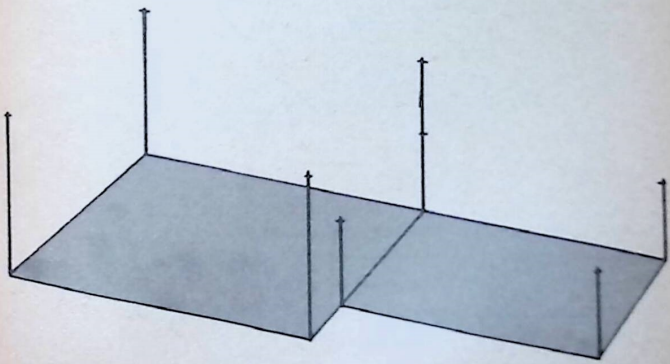
Here is a house which, minus the gable roofs, suggests a large and small box joined end to end. The position of the house as shown in the picture is not suited for a conversational drawing. But it discloses enough of its secrets to be successfully redrawn. You must look down on it more. This is easily accomplished by drawing a floor plan at an angle that is *not* horizontal, and deep enough to convey the depth of the house. The two rear walls form a straight line.



Now to build the house on that foundation. On page 33 you learned to draw a box by starting with the top rectangle and working down. Here you will learn how to draw a box by starting with the bottom rectangle. This is necessary when the position of the box is predetermined.

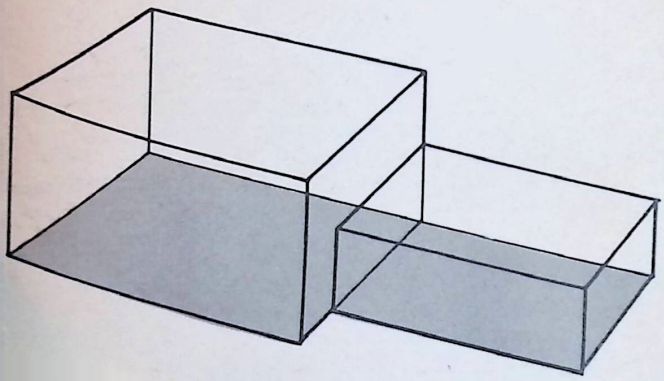
2

First you must construct two boxes on the floor plan. Draw the vertical lines at each of the corners. The larger box necessarily has larger corner lines, all equal in size. The small box has smaller lines, all equal in size. The height of these lines determines the height of each box and the point at which the gables will start.



Now complete the two boxes by drawing straight lines joining the tops of the vertical lines in each set. This will finish the sides of the boxes and complete them at the same time. The boxes will be upright and they will not be out of shape. You must be very careful to make the four corner lines of every box you draw THE SAME SIZE. This cannot be stressed too much. All the rectangular boxes you will draw will bear the responsibility of a good or bad finished drawing.

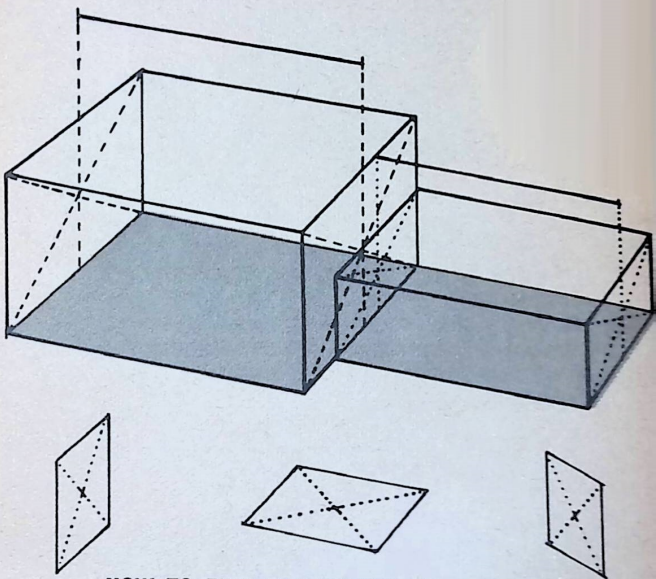
3



HOW TO DRAW THE GABLE ROOF

4

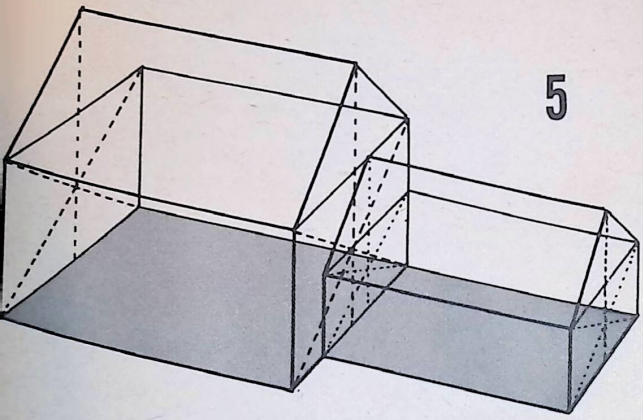
Find the center of the end panels of each box by joining the diagonally opposite corners. (For the sake of clarity, the dotted line is used in the smaller box, the dash line in the larger box.) Where these lines cross you have the center of the panel through which you will then draw vertical lines, starting from the floor up to the desired height of each gable. The height of each set of lines must be the same to insure a level gable on each roof. Join the tops of these two sets of lines with straight lines.



HOW TO FIND THE CENTER OF A PANEL

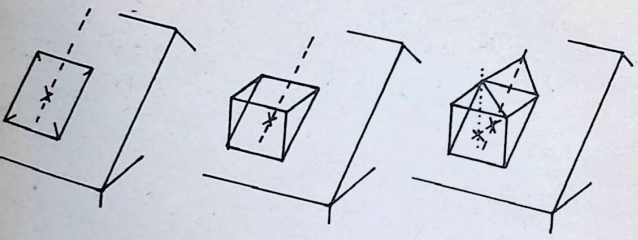
Draw lines joining the opposite corners of the rectangle. The intersection point is the center of the panel.

From each end of the horizontal gable line draw another straight line to corners of that end of the box. This will complete the roof and also the general outline of the house. Adding gables to the boxes gives an immediate image of a house.



5

HOW TO CONSTRUCT A GABLE WINDOW



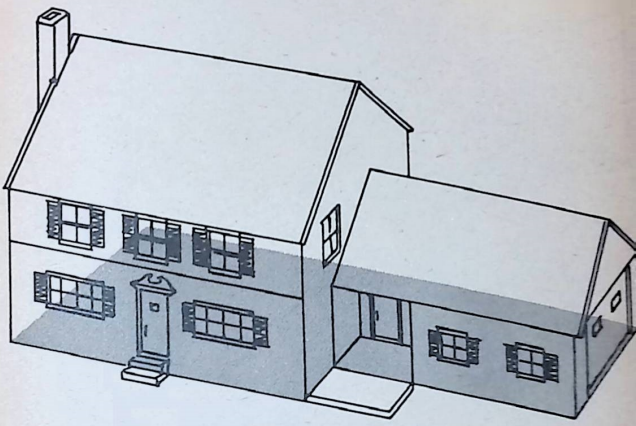
1. Draw the rectangular opening in the roof.

2. Draw a vertical panel at the bottom of the opening joining a horizontal panel at the top of the opening.

3. Draw a gable over the horizontal panel from the front panel to the roof.

By adding such features as chimney, doors, windows and steps, and planning a small area as a patio where the garage joins the main building, you have completed the house.

6



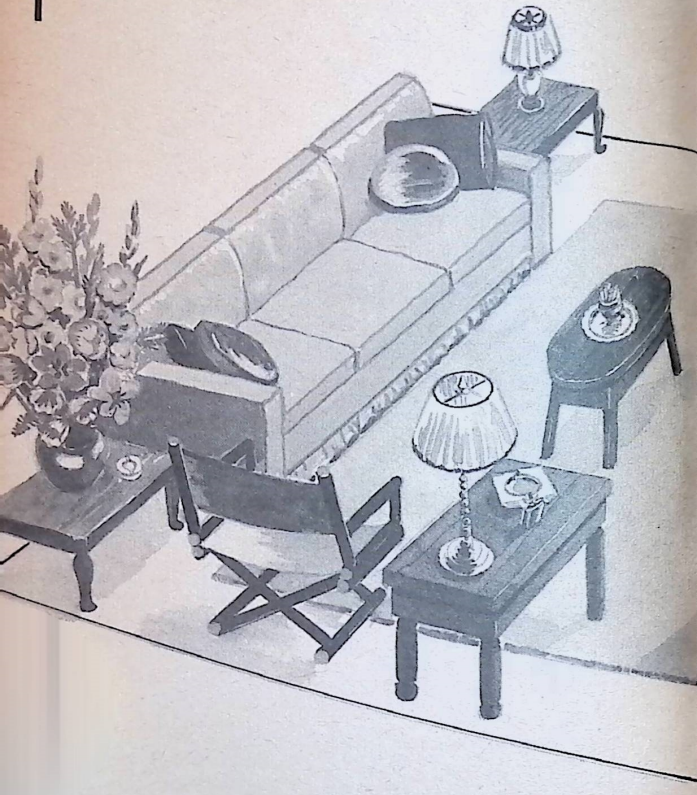
Two boxes of the proper proportions were the basis for drawing the house. Once more it shows the importance of a strong awareness of form. Such awareness permits you to look at any group of buildings and see it as a cluster of different-size boxes. Now that you know how to join boxes together you will have no difficulty in drawing any group of buildings.

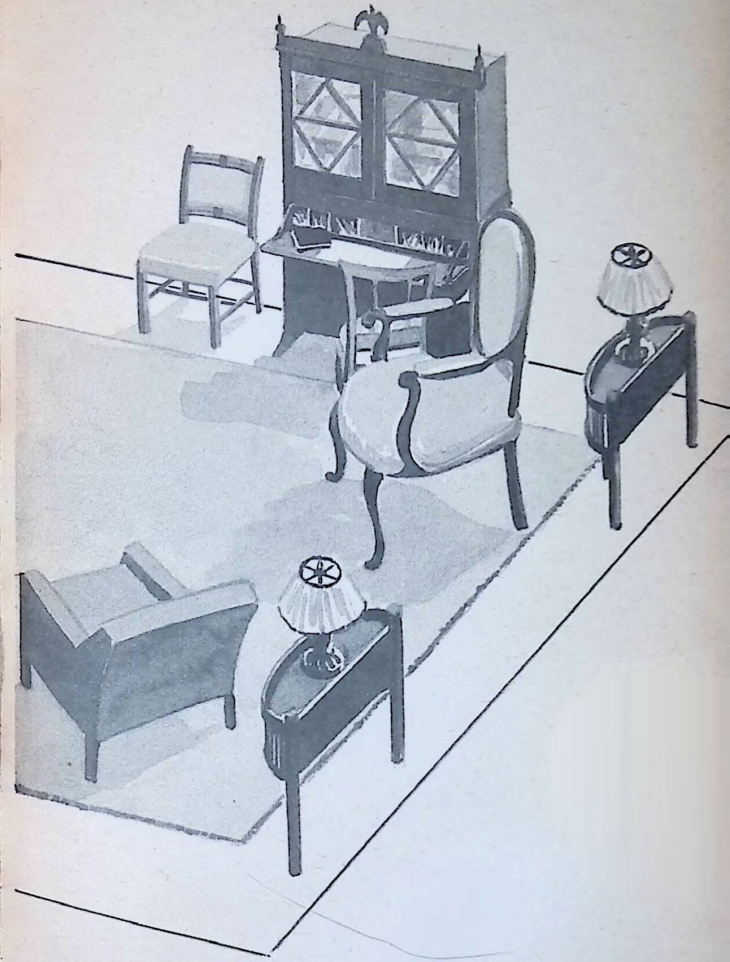
DRAWING A FURNISHED ROOM

The next step will be to draw the living room of the house, furnished as it is shown in this illustration.

All pieces of furniture in this room will be treated as boxes, each of them having its own proper proportions.

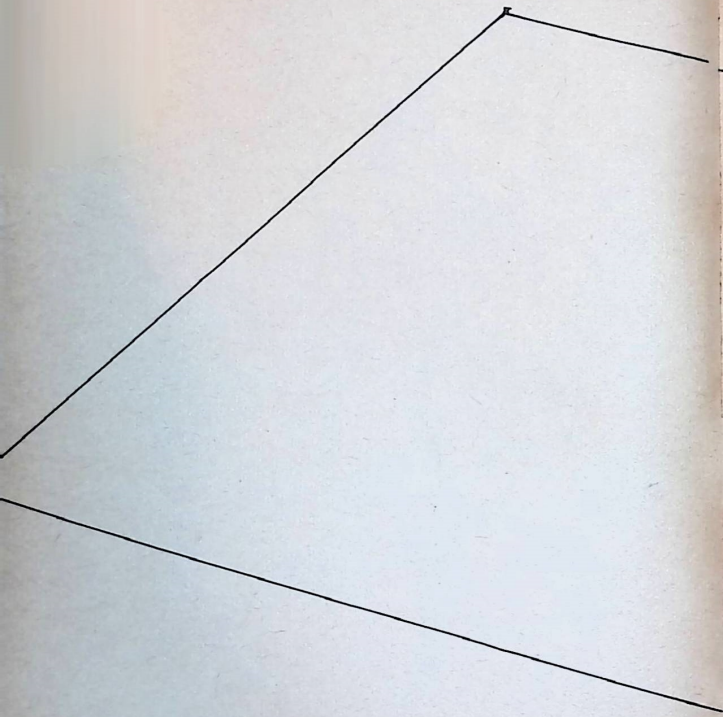
1



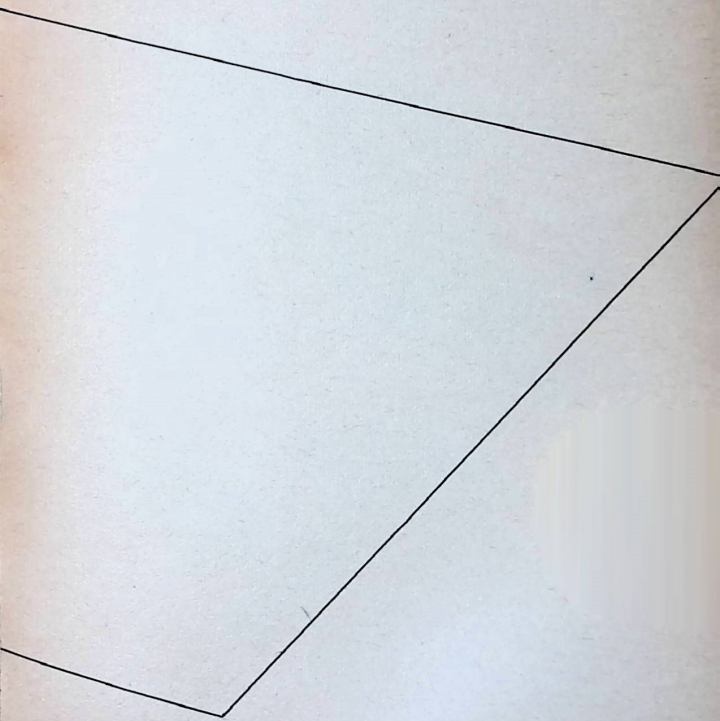


Because each piece has a predetermined position on the floor, all objects must be drawn from the bottom up, as was done in the case of the house. You will be guided step by step, so pay strict attention to the detailed instructions.

2

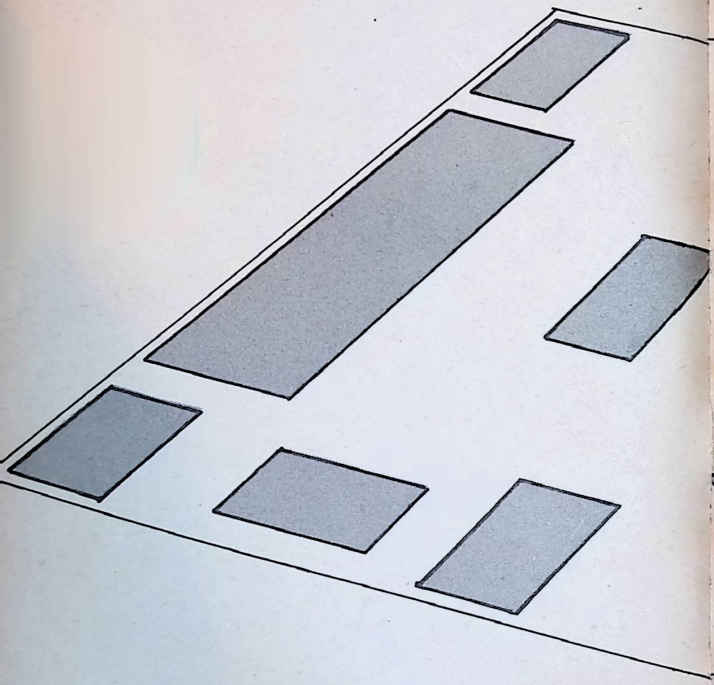


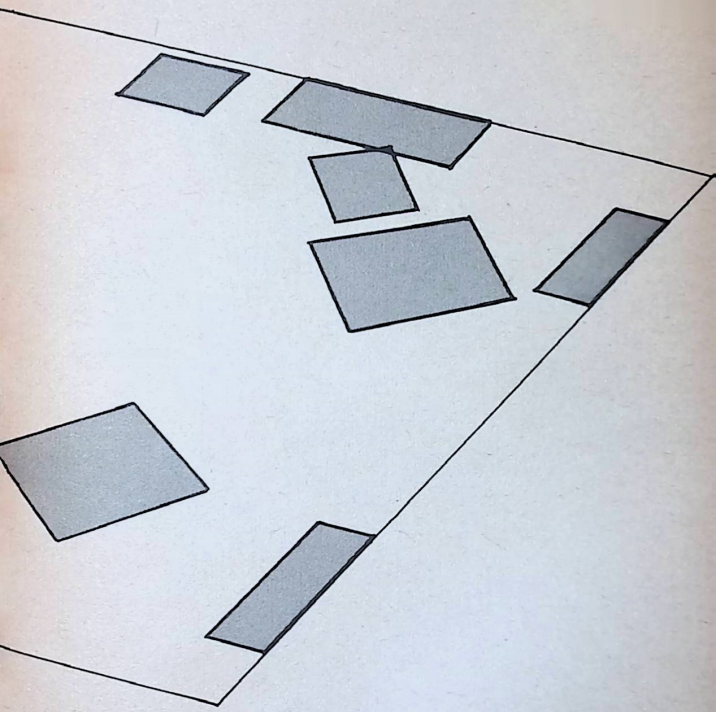
The rectangle represents the floor of the living room. Copy it on a piece of paper, the same size, and then allocate sufficient space above the rectangle to allow for the height of the furniture. Please use this one drawing and keep adding to it according to the instructions on pages 50 through 57.



Copy all rectangles, but be sure that you don't change their sizes or positions. Each rectangle you draw represents the floor area occupied by a piece of furniture in the picture on pages 46 and 47. Because each piece of furniture derives its form from a box, start drawing these boxes, beginning with the bottom rectangles which rest on the floor.

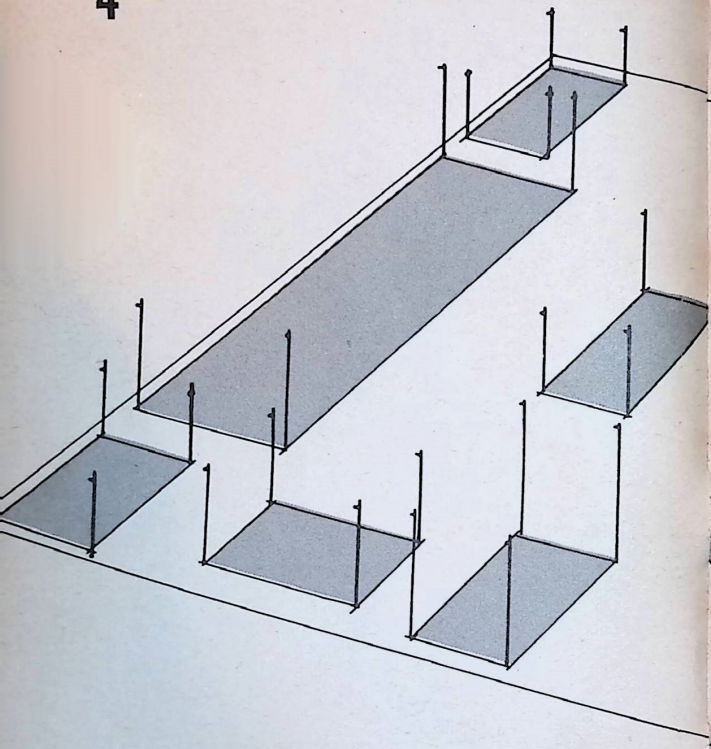
3

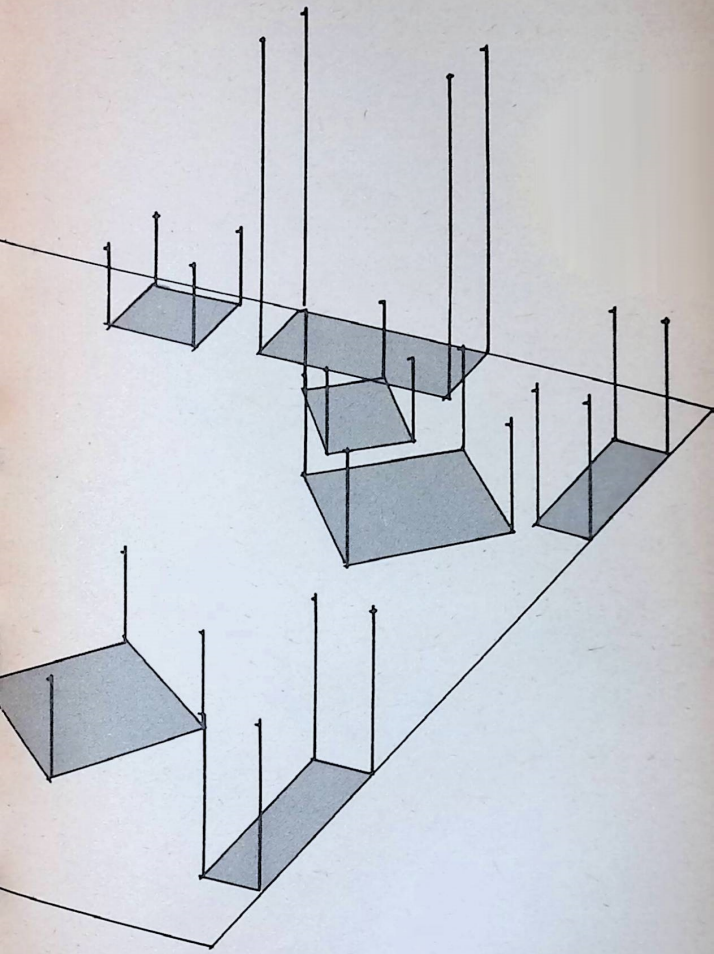




Once you have drawn the bottom rectangles, the next step is to draw the four vertical lines at the corners of each unit. Arms and backs of chairs and couches are considered accessories. In those items, therefore, the boxes drawn should only be seat high. Be very sure that the four vertical lines of a given set are of equal height.

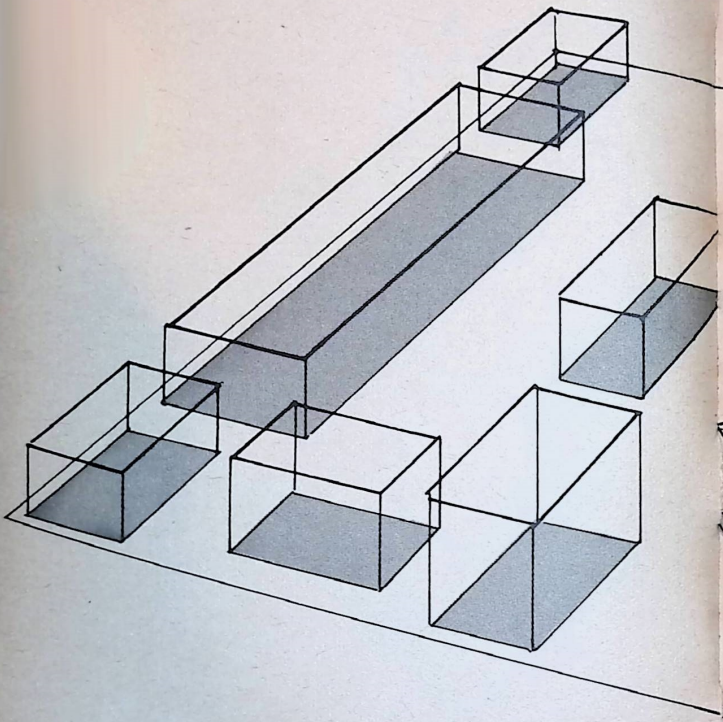
4

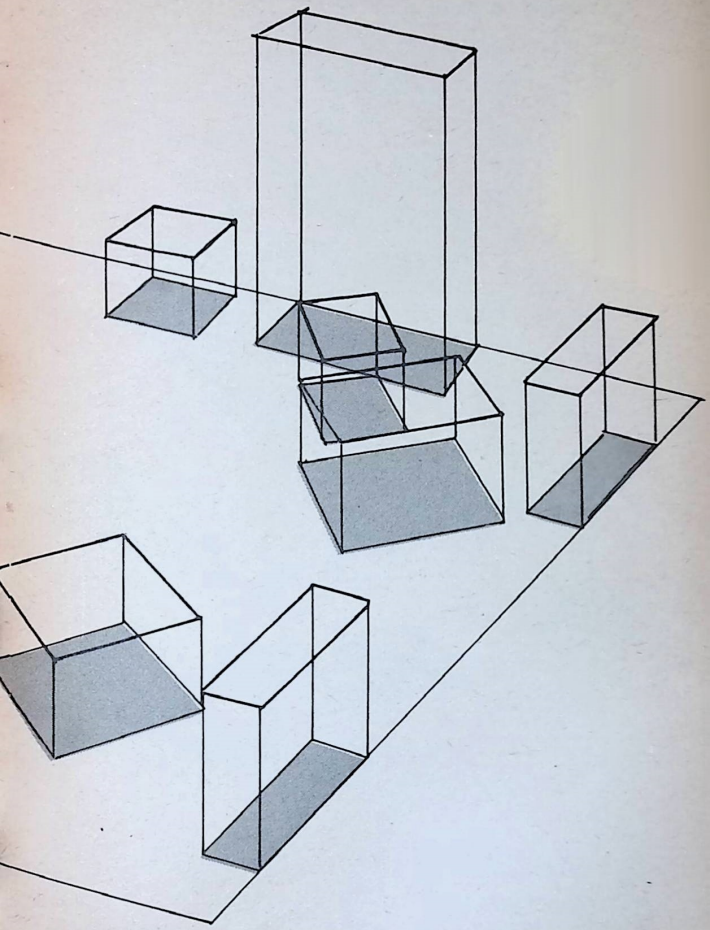




Now complete each box with its respective top rectangle. Compare this drawing Number 5 with drawing Number 1 on pages 46 and 47, and see the resemblance each box has to the piece of furniture it is to represent.

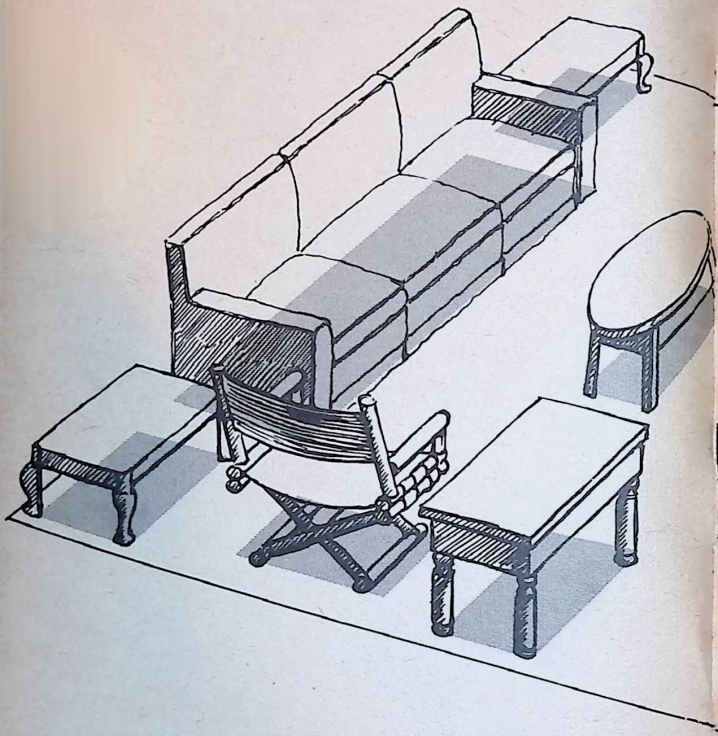
5

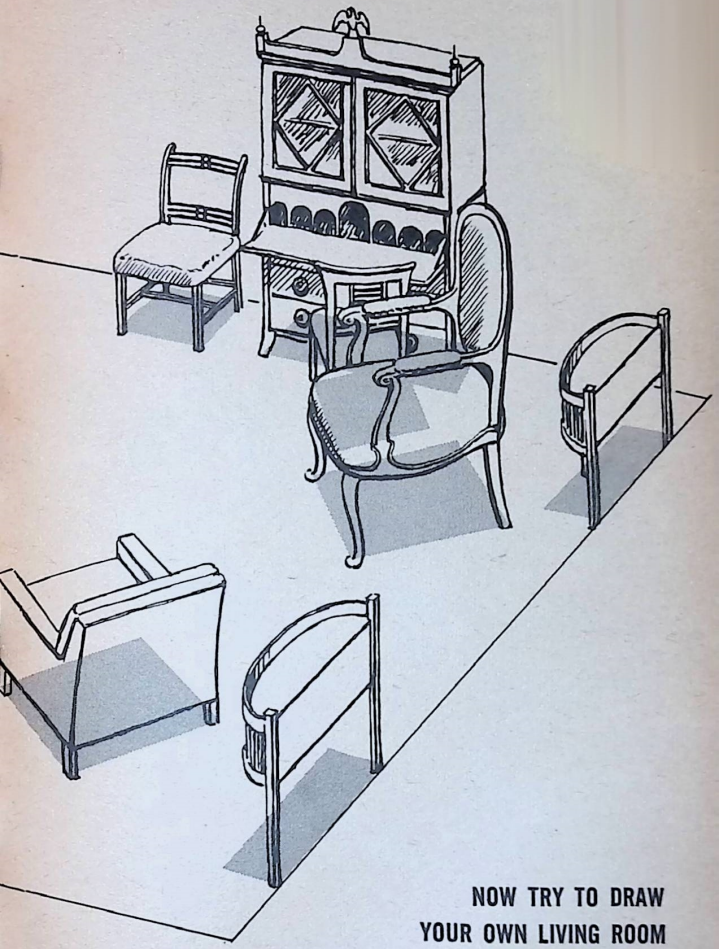




Add the features to the separate pieces and get the thrill of seeing each come to life. Some objects are more complex than others, and you may not at first see how they are constructed. Such items are given special attention on pages 58 through 61.

6





NOW TRY TO DRAW
YOUR OWN LIVING ROOM

A chair of this style can have many types of back rests and arms. The main section of the chair is represented by a box formed by using the seat as the top rectangle, and using the distance to the floor for the height. Features are considered accessories.

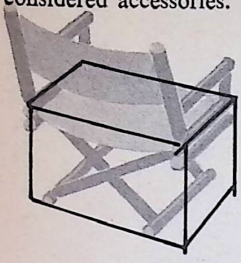
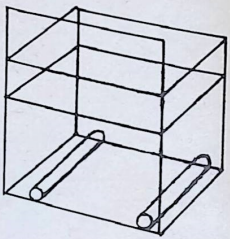


Fig. A

Starting with the box, draw the horizontal bars resting on the floor. Extend the height of the sides of the box to include the arm rests. Extend the back vertical lines of the box upward to form the back rest.



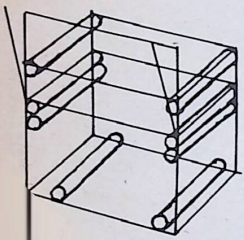
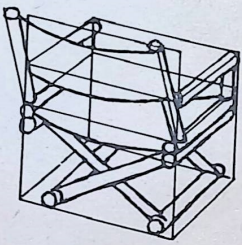


Fig. B

Draw the seat and horizontal arm bars. Indicate the slant of the back rest.

Fig. C

Complete the chair by adding the slanted rods for the back rest. Draw the canvas back and seat. Draw the cross braces for the legs.



Visualize this chair as a box whose top rectangle has dimensions determined by the width and depth of the seat. The height of the box is determined by the distance from the seat to the floor.

Extend the height of the box to provide for the arms, and extend the rear vertical lines upward to plan for the back rest. Shape the seat and legs.

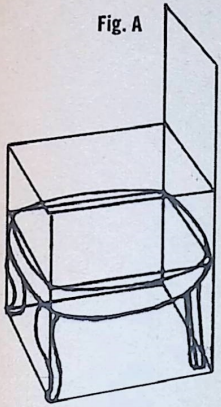
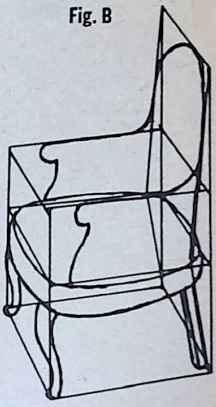


Fig. A

8

Indicate the slant of the back rest, the draw its outline. Also draw the sha of the arm rests.

Fig. B



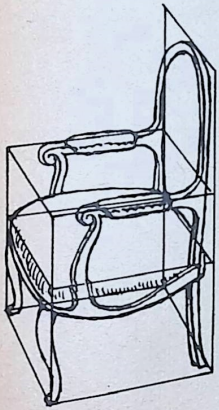
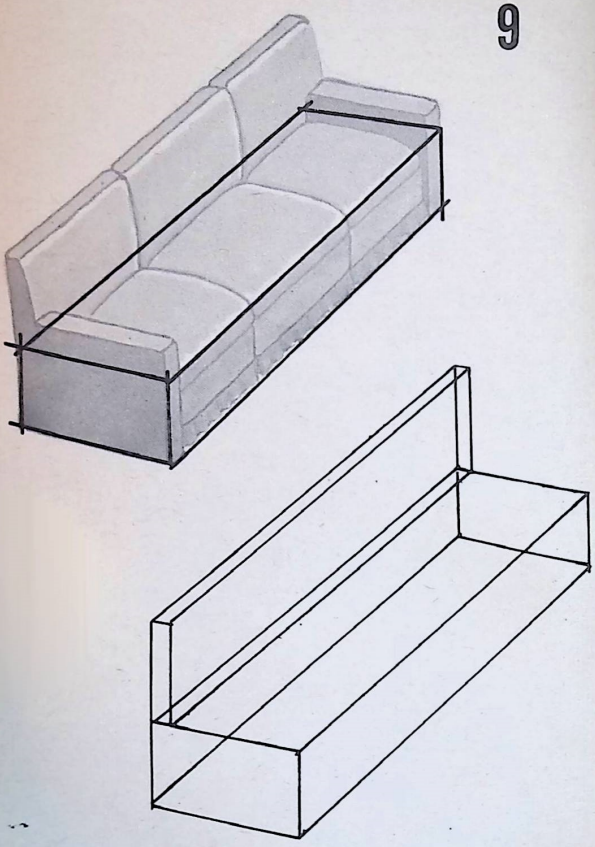


Fig. C

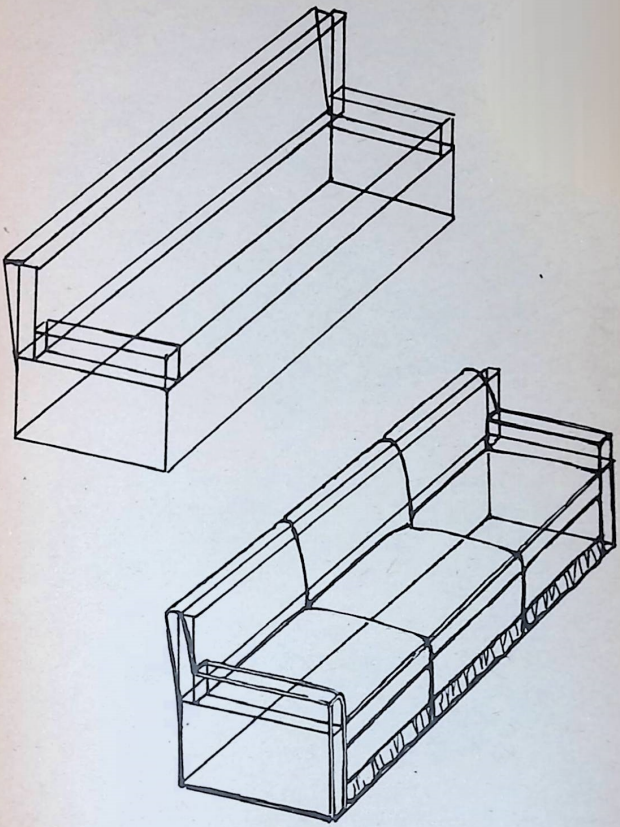
Complete the chair by adding details of the arms, back and seat.

The couch is easy to draw when you become aware that it looks like a long horizontal box. Be careful of this long box's dimensions, because the top rectangle takes its measurements from the length and depth of the full seat *plus* the thickness of the back and arm rests.



The back is a long, thin box lying on its long side, resting on the rear of the seat, as shown in this illustration.

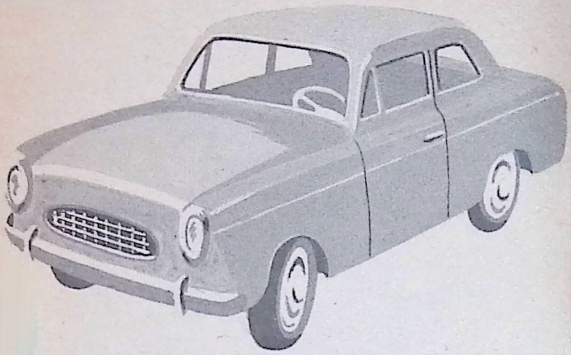
Each arm rest is treated as a small box resting on each short end of the long box. The back must then be adjusted to tilt back slightly.



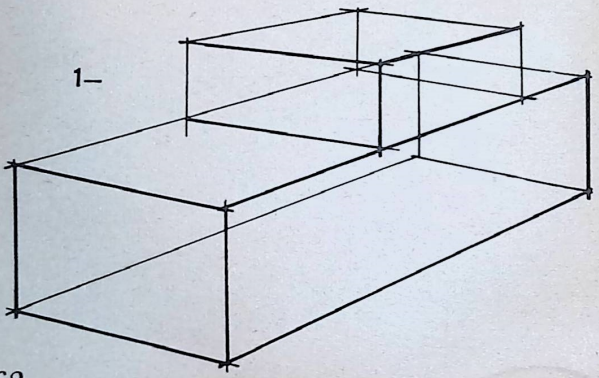
Now complete the drawing by making the pillow separations, indicate the piping and the bottom ruffle with closely drawn double lines. The corners of an overstuffed couch are slightly rounded to give it a soft, comfortable look.

HOW TO QUICK-SKETCH AN AUTOMOBILE

Visualize the car as a long narrow box whose top rectangle takes its measurements from the length and width of the car. The height of this long box is determined by the distance from the ground to the highest point of the hood.

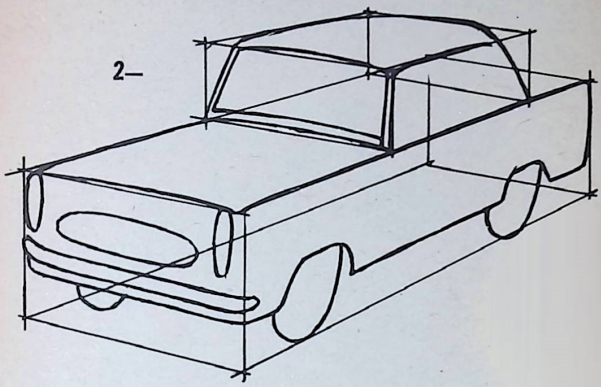


On this long box draw a smaller one resting on it which will represent the car's top. The beginning for this small box is the bottom rectangle. It gets its measurements and location from the opening in the car which is provided for the seats.



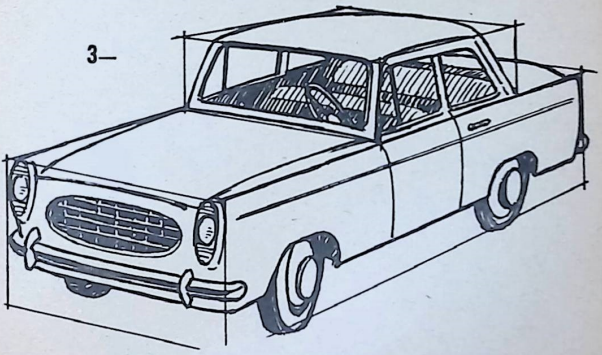
In the larger box draw the general contour of the body and in the smaller box the contour of the top. Then indicate the position of the wheels, radiator, grill, headlights and bumper.

2—

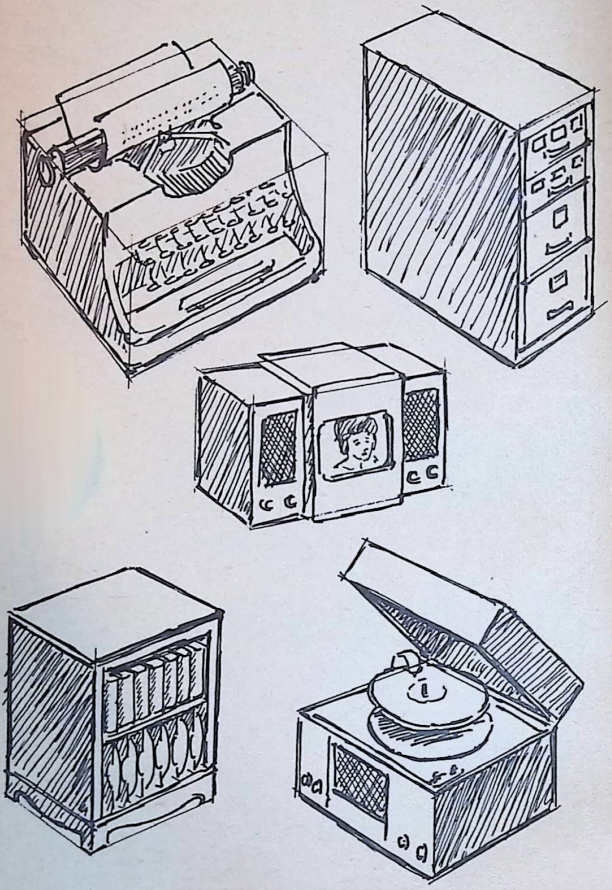


Finally, add the details of windows, doors, seats and steering wheel, and the car is finished. A simple method of quick-sketching any type of automobile or truck, it should prove useful. Trains can also be drawn with ease by being aware that the individual cars are long, narrow boxes joined end to end.

3—

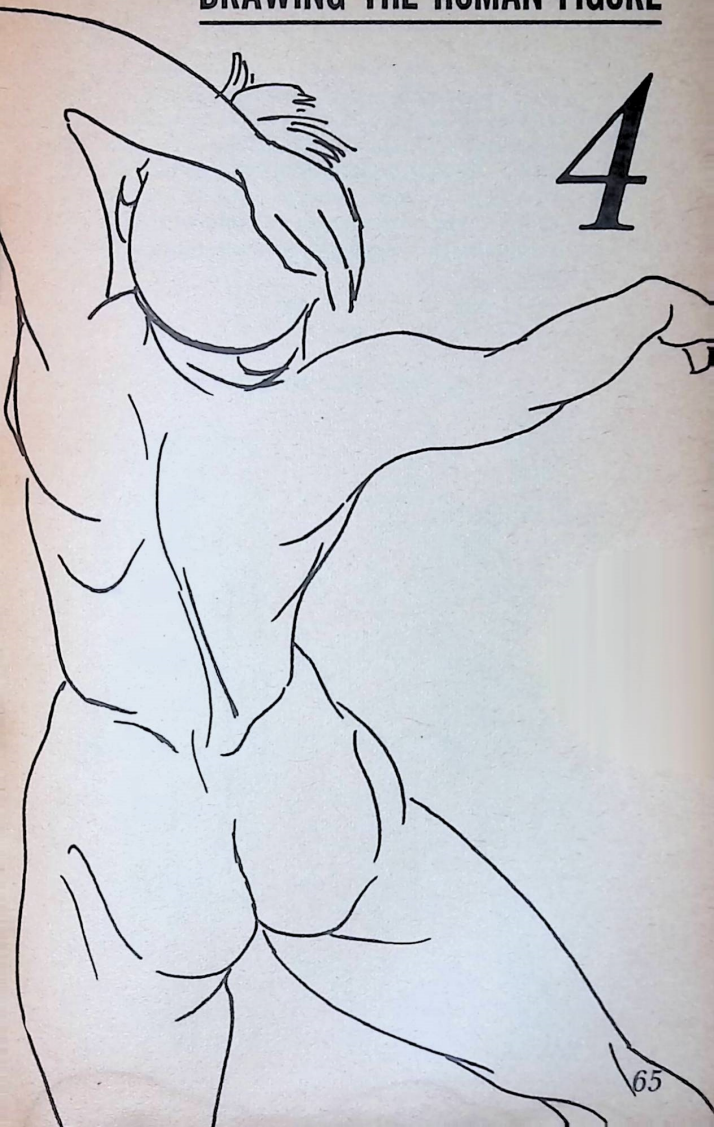


Look at the objects around the house and the office and you will find that many derive from the basic box form. Sketch them and begin by putting down the proportion of the box that fits the object. Then draw those major cut-away areas and divisions which are clearly defined. Last, finish your sketch by adding the features.

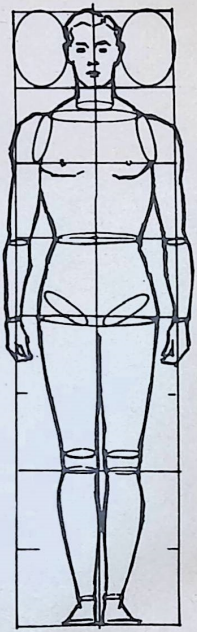


DRAWING THE HUMAN FIGURE

4



Drawing the human figure is like stringing beads. But, in this instance, the individual beads are made while stringing them. The human figure is a living object that has a major cylindrical section called the torso, to which minor cylindrical features are attached. The relative proportions of parts of the body may be defined by *ideal* standards. You already know how to draw cylinders. Careful attention to and application of the proportions used here will guide you (without specific artistic talent) in the drawing of a normal human figure.



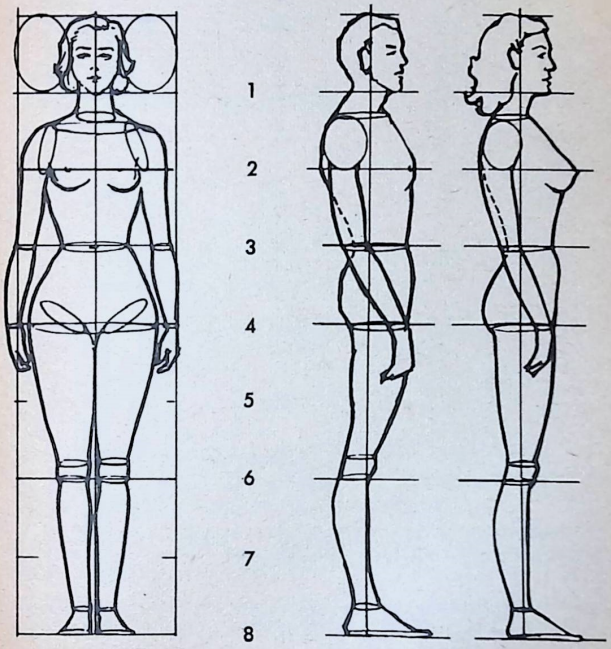
It will not be difficult to remember the facts and figures on this page. The model is eight heads high. The male shoulders and waist are broader than those of the female. The female is broader across the middle. The male contour is more rugged and angular than that of the female.

Follow the illustrations on this page if further guidance is necessary.

The subdivisions are in eighths:

1. head
2. nipples
3. navel—elbow
4. crotch—wrist
6. bottom of knee
8. base of heel

The ankles are one-third up from bottom in last eighth.



The spine is the center cord of the body. Therefore start by drawing a vertical line upon which to plot the drawing of the figure.

Fig. A
Draw a vertical line and define its desired length with horizontal marks, top and bottom.

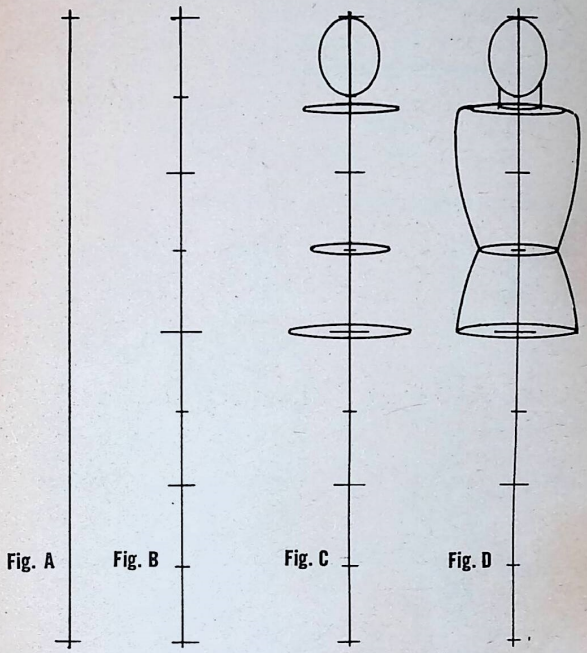


Fig. B
Divide this line into eighths, using the following procedure: first—... halves, second—in quarters, third—in eighths.

Fig. C
Draw four ovals: wide oval for head, long narrow oval for shoulder, short narrow oval for waist, long narrow oval at crotch.

Fig. D
Complete the torso: join ovals from shoulder to waist, from waist to crotch; with straight lines connect head to small oval in shoulder oval.

Follow the instructions below and remember, always, to use the same procedure when constructing a figure from memory or from pictures.

Fig. E

1. Draw narrow ovals for arm connections at shoulder.
2. Draw narrow ovals for leg connections at crotch.

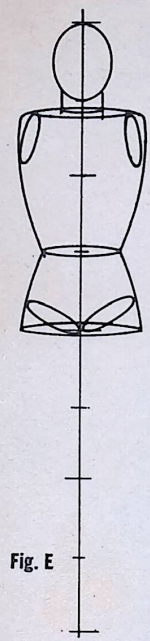


Fig. E

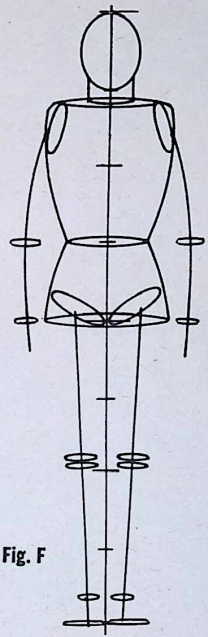


Fig. F

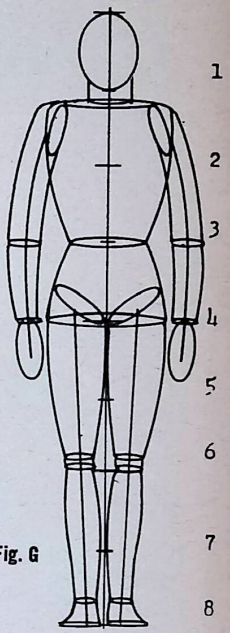


Fig. G

Fig. F

1. Draw skeleton lines for arms and legs. Note where they start and end.
2. Draw very small ovals for elbow, wrist, knee and ankle joints. Double oval at the knee. Also draw thin oval for base of foot.

Fig. G

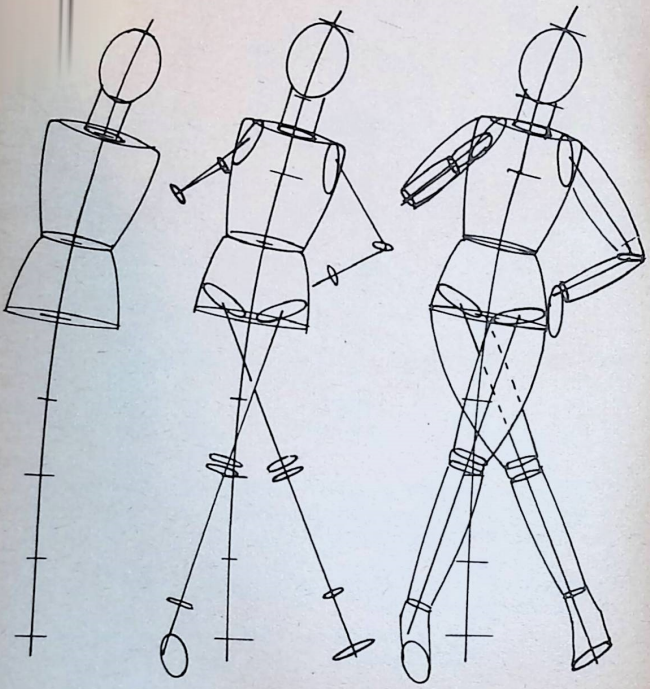
Join ovals from shoulder to elbows; elbows to wrists; crotch to knees; knees to ankles; ankles to base.

Draw ovals at wrist for hands. The size of the open hand is equal to the distance on the face from base of chin to hairline on forehead.

HOW TO VISUALIZE THE ACTION IN A FIGURE

When drawing the figure in action, begin by drawing a line representing the action of the spine. This line will represent the action of the torso. Even though the head, arms and legs take independent action, the torso line must follow consistently in order to establish the basic proportions of the full figure.

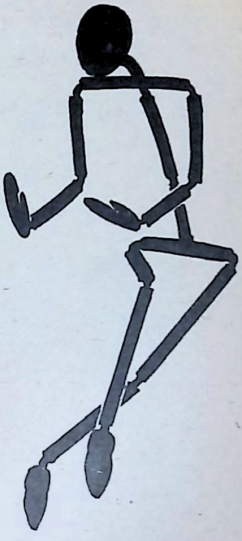
The illustration below chooses a curved line at random to establish the action. The method is exactly the same as when drawing the straight figure. Therefore fewer drawings are shown. Have fun.



Here is a simple way of becoming aware of the physical form and possible actions of a human body.

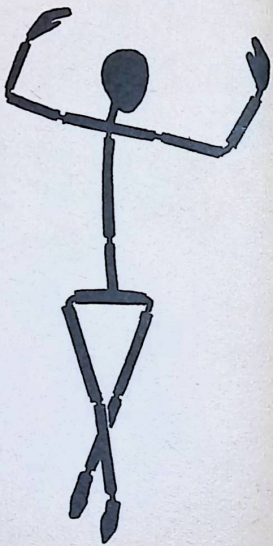
There is a plastic skeleton on the market, about five inches in height, which can be bent and twisted into any position taken by the human body. And it holds that position until you change it.

With your attention focused on the picture of a figure, you can twist and bend such a plastic skeleton so that it assumes the action in the picture. Pay particular attention to the action of the spine, the direction of the shoulders and hips. And the angle of the head.

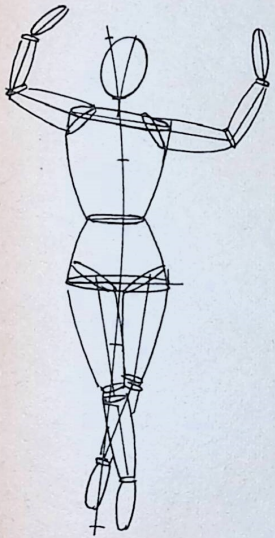


HOW TO USE NEWS CLIPPINGS TO HELP DRAW THE FIGURE

Now, to follow up the training exercise of the previous page, choose the picture from a news clipping that you would like to work with. Bend the plastic model to fit the action of the figure in the picture, being very careful to bend the arms and legs sharply at the joints. Watch the action of the head, the direction it takes, and the angle of twist in the shoulder and hip lines.

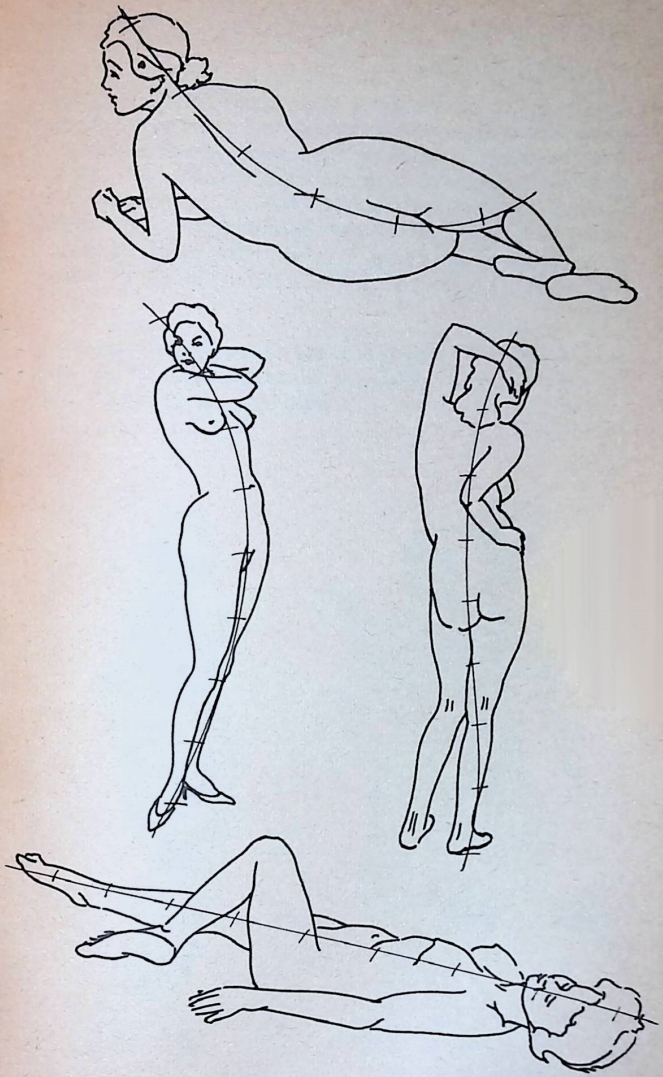


Using the newly bent plastic model to work from, begin the picture by drawing the basic center line; divide it into eighths, and continue to finish the nude outline as on page 70. Then place a sheet of transparent tissue over the drawing and, using the nude figure as a guide, complete the draped figure, using the news clipping to refer to for details. This exercise will hasten your awareness of the form of the human figure.



SKETCHING FROM LIFE

If you intend to sketch from life, it is strongly suggested that you do so only after you have given much time to the exercises on the previous pages. Then proceed by putting down the action line first, divide it into eighths, and follow through as when drawing from the news clippings. It is advisable to have a strong light shine from either left or right to emphasize the planes of the figure. Posing time—25 minutes, rest period—5 minutes.



HOW TO DEVELOP THE AWARENESS OF FORM IN FIGURE DRAWING

Use pictures of figures that appear in the daily newspapers and magazines (samples appear below), to help analyze the action in which the figures are portrayed. On these pictures draw the construction lines of the figures. Do not attempt to draw the features. That is the next step and should be done after you are thoroughly familiar with the construction of the figure. You will have arrived when you can build a figure of your own without the aid of printed copy.

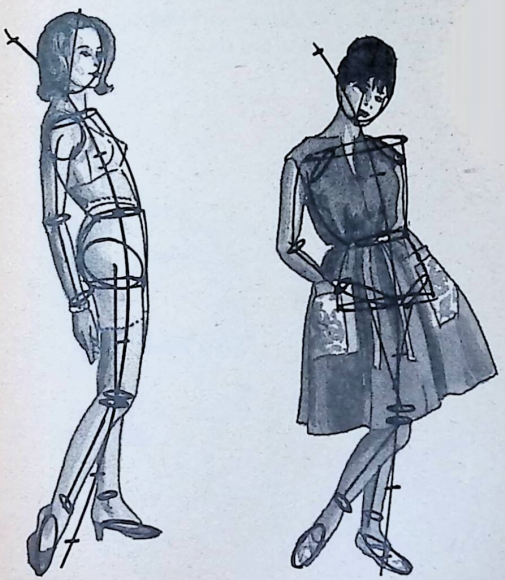
All parts of the body are derived from cylindrical forms, joined individually or as part of another unit to the torso. Become aware of their sizes relative to one another and to the torso.

PROCEDURE FOR PRACTICE EXERCISE

(this is identical to the procedure on page 70)

1. Draw the action line of the figure which is based on the action of the torso. This follows the line of the spine from the center of the neck down through the base of the spine and on to the base of the heel.
2. Divide the line into eighths.
3. Draw the ovals at the shoulders, waist and crotch and join these ovals with side lines.
4. Draw the wide oval for the head, and thin ovals at the neck, elbow, waist, knee, ankle and base of foot.
5. By joining all these ovals in their proper order the figure will be completed.

This training should make you aware of the varying positions taken by the three important ovals at the shoulder, waist and crotch when the figure is in action. For side-view assistance, refer to page 67.



Situations supplied through courtesy of R. H. Macy.

HOW TO DRAW THE HEAD

The head in Fig. A is eyes-level front. It has the shape of an egg with the broad diameter up. In this position the head can be framed in a rectangle which is shortened in height to the hairline at the forehead.

The remaining area is divided into three equal horizontal sections. The top section locates the forehead. The middle section locates the ears, eyes and nose. The top line of the middle section locates the top of the ears and the eyebrows. The bottom line of the middle section locates the bottom of the ears and the base of the nose at the point where it joins the face. The center of the eyes is about one-third down in this middle section.

The middle section is also divided from left to right into five vertical and equal parts. The nose is in the middle part, with an eye in each area to the left and right of the nose. The base of the nose and the width of the eye are the same—one part wide. The first and last parts are blank, except for a slight intrusion of the ears.

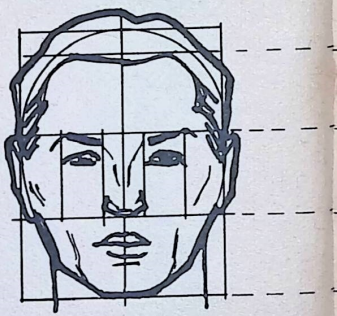


Fig. A

The bottom section holds the lips—the bottom of the lower lip is half way down this section. The width of the lips is slightly more than the width of the nostrils. The width of the neck is slightly less than that of the head at the jaw line below the ear.

When looking at the head in profile, Fig. B, the proportion is best represented by a circle within a square, with the horizontal lines carried over from the front view. Draw a vertical line down the center of the circle and place the ear, in the center section, a little to the right of it. The nose projects slightly out of the square and is as wide in profile as in the front view at the nostrils. A slightly curved line from brow to chin will help to locate the features. By shortening the curve of the circle in the middle section back of the head you locate the base of the skull. The front line of the neck is midway between the chin and the center of the head. The rear line of the neck is well back of the ear.

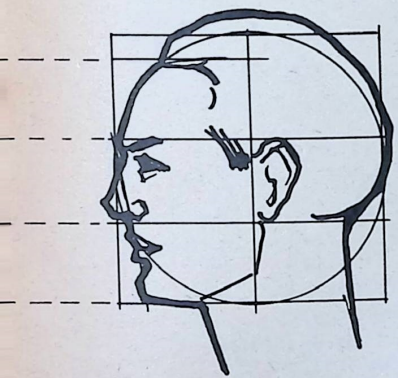


Fig. B

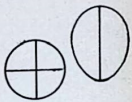
WHAT HAPPENS TO FEATURES AT DIFFERENT ANGLES

It is easier to learn new tricks when the tricks amuse you. So, here's a suggestion that should help to clarify the position of the features when the head is turned in different positions.

Hold a hard-boiled egg, narrow end down, and draw on it, as follows:

1. A line down the center of the upright egg from top center to bottom center, and all around to the top again.

2. Do the same at right angles, thus dividing the egg into four vertical quarters.

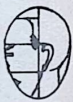


3. Still holding the egg broad end upright, draw a horizontal line a short distance from the top, denoting the hair line on the forehead.

4. Draw two more horizontal lines dividing the remaining front area into three equal parts.

5. Divide the middle section into five equal vertical parts, from left to right, as viewed from front-optical view.

6. Indicate the eyes, nose and ears in the middle section, and the mouth in the bottom section.



Now let's use the egg to understand better how to draw the changing position of the features when the head moves to another angle. The pattern of features never changes, but the contour of the pattern changes according to the way the pose varies.

Hold the egg, top and bottom, between the tips of your thumb and forefinger. Turn and tilt egg until you duplicate any position on this page. The direction of the features follows the contour lines on the egg, and these lines will serve as your guide in analyzing picture clippings.

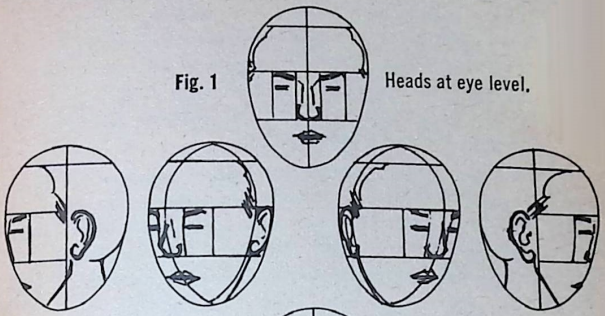


Fig. 1 Heads at eye level.

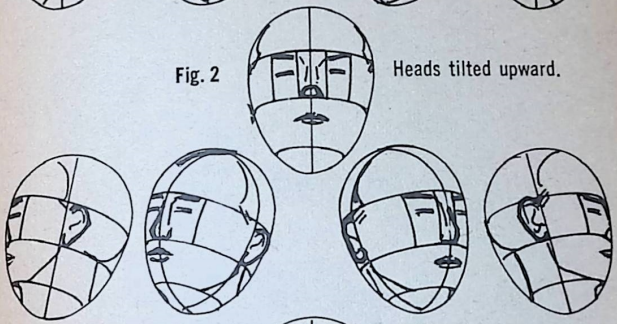


Fig. 2 Heads tilted upward.

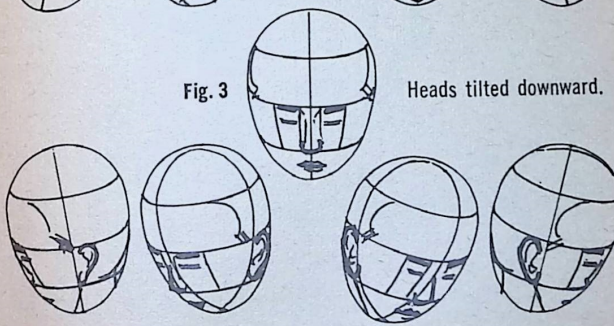


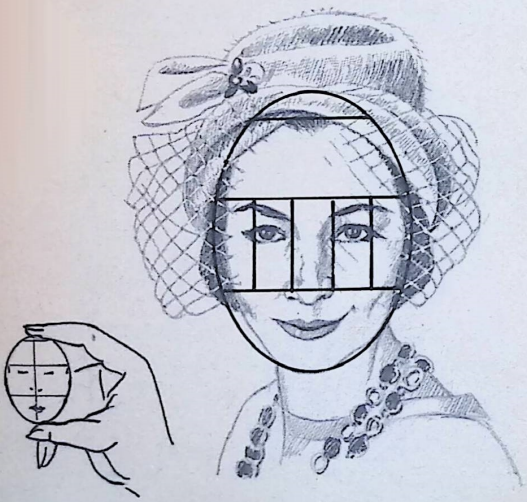
Fig. 3 Heads tilted downward.

.PRACTICE EXERCISE IN DRAWING THE HEAD

These illustrations show how to analyze clippings of heads. Analyze them for direction of the head and placement of the features.

The egg (on which you've just drawn guide lines to serve as a model head) will help determine the directions of the guide lines which control placement of the features. Hold the egg between the tips of the thumb and forefinger, turn it and change its angle until the direction of the features matches those on the clipping.

The lines on the pictures that follow demonstrate how to draw analysis lines on your clippings. Continue to practice with these heads. Then get some newspaper and magazine clippings. This exercise will make you aware of the shape of the head and give you a method of quick-sketching people.

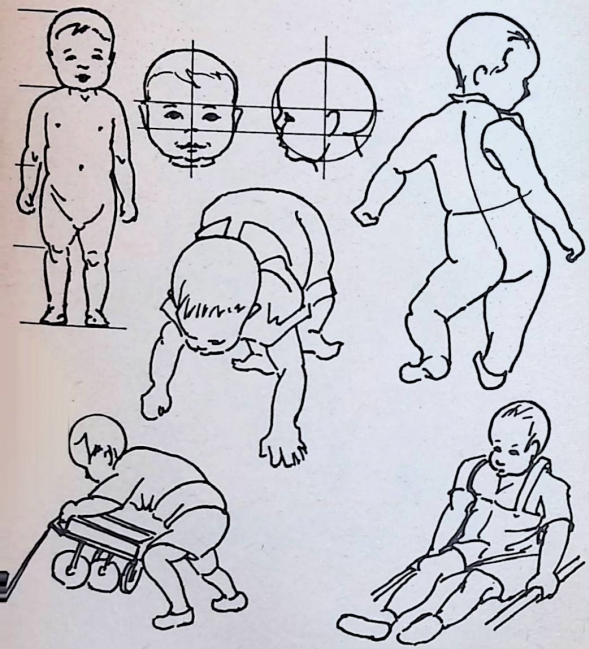


Situations supplied through courtesy of R. H. Macy.

Children are harder to draw. They won't stay put. To develop your awareness of their form, you must analyze pictures of children in action.

Find the center line of action. Across it, draw the direction of head, shoulders and hips. A year-old child's head is one quarter the size of his body. The center of the body is the navel, the knees at the lower quarter, the crotch a little above the knees.

Front view, the head is like a short egg, with the halfway mark at the eyebrows. All above is forehead. Eyes, ears and nose are in the third quarter, and the last quarter is divided equally between lips and chin. The side view is based on a circle.



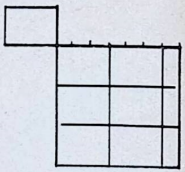
ANIMALS AND BIRDS

5

This chapter is designed to familiarize you with the forms of birds and animals. It is not intended as a lesson in their artistic rendition. You will be able to draw animals, birds and flowers when you become aware of their forms. Absorb and retain that awareness by looking for certain simple, structural and important information.

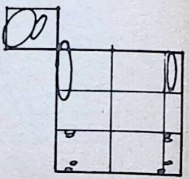
These shapes may not obligingly conform to cylinders and boxes. Their shapes may try your judgment about form and proportion. Make comparisons of adjoining lines for direction, and of masses for size and shape. Natural objects may strain your awareness of form, but drawing them does not require any added artistic ability. The profile of the horse fits into a neat pattern which helps in drawing the animal. Note the large square, which is divided as follows:

Divide the top line into seven equal parts and draw vertical lines downward at the third and sixth points. This will make two equal sections and one narrower one.



Then divide the square horizontally into three equal parts, making a total of six equal large-size rectangles and three smaller ones.

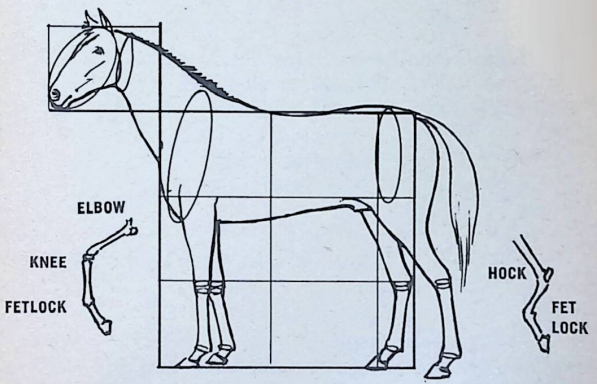
The odd rectangle at the upper left corner of the original square is equal in size to one of the six larger rectangles, and is made by extending the top and left sides of the large square.



In the left half of the odd rectangle, draw an oval, which will represent the horse's head.

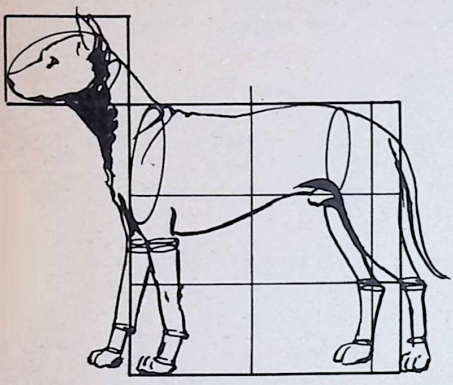
In the horizontal top third of the large original square, locate the torso by drawing two narrow ovals, the one at the breast slightly longer than the one at the flank. These ovals, when joined by swaying lines, make the torso. Add a thin neck oval at the right side of the head, and a narrow oval across the shoulder, and join them with two lines to make the neck. The leg ovals are then placed and joined by lines to shape the legs, in the same procedure as that used in drawing the human figure.

It is important to note that:
1. the knee joint of the front leg and the hock joint of the rear leg bend in opposite directions.
2. the ears project out of the rectangle for the head.
3. the rump and tail project out of their rectangle.
4. the stance of the horse indicates the legs are not in a vertical position but slant slightly to the rear.

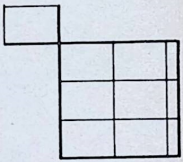


By following this pattern of rectangles the proportions of the horse will not be distorted. By exercising reasonable care, the legs and torso will not be too heavy.

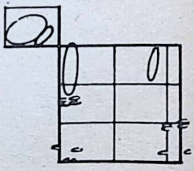
The following dog, cow and tiger illustrations demonstrate the varied proportions and silhouettes of those animals. Pay careful attention to posture and proportion. Cylindrical forms and their use are identical with the procedure for drawing the horse. Remember that you are trying to draw and convey the impression of an animal.

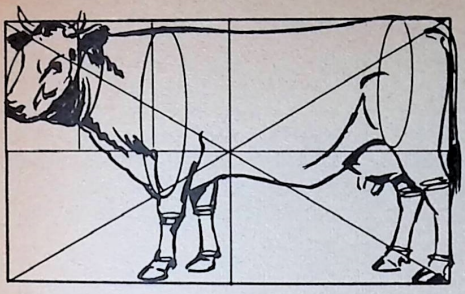


THE DOG'S proportions and profile follow those of the horse rather closely. The tail is long, but without flowing hair. The belly line is close to the chest barrel and slopes in reverse toward the pelvis. Note that the bone structure of the leg is different.

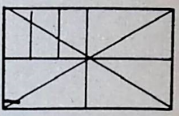


The overall rectangle is square and divided into six equal large, and three equal small, rectangles. The odd rectangle attached to the overall square at the upper left corner equals one of the larger six rectangles.

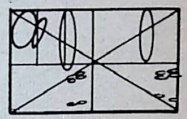


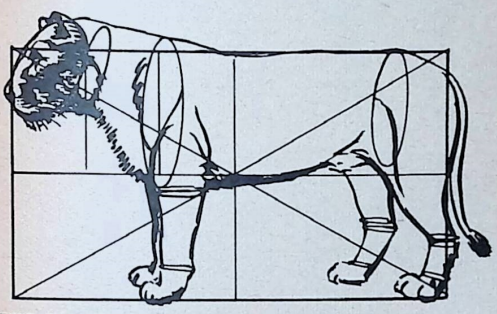


THE COW'S profile is unique. A straight horizontal line forms the top boundary of the head, torso and rump. The torso takes up more than half the height of the animal.

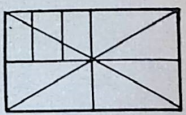


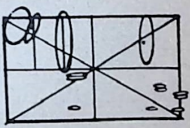
The outside rectangle is 3 x 5 and divided into four large equal sections. The top left section is then divided into three equal parts.



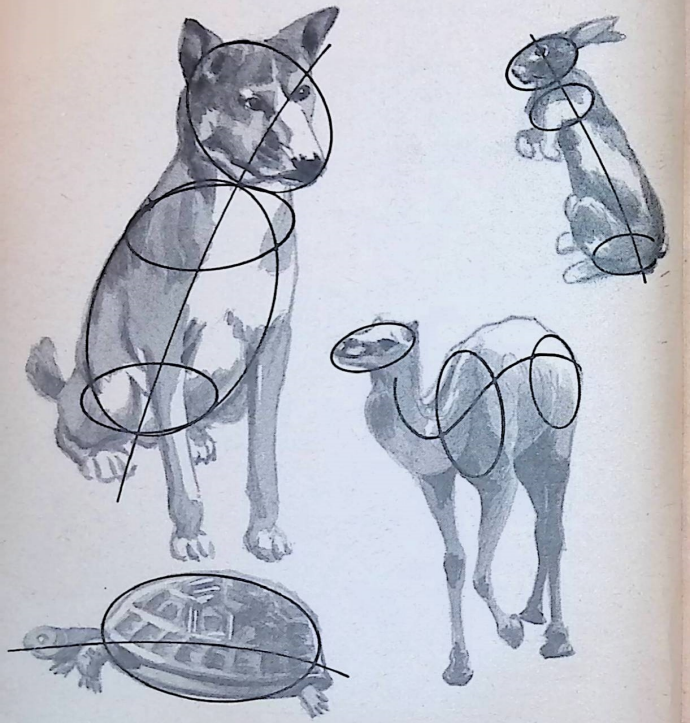


THE TIGER'S posture resembles the cow's, with the head slightly raised, the tail bushy like that of a cow. Outside rectangle—3 x 5¼—four equal sections and three smaller equal ones.

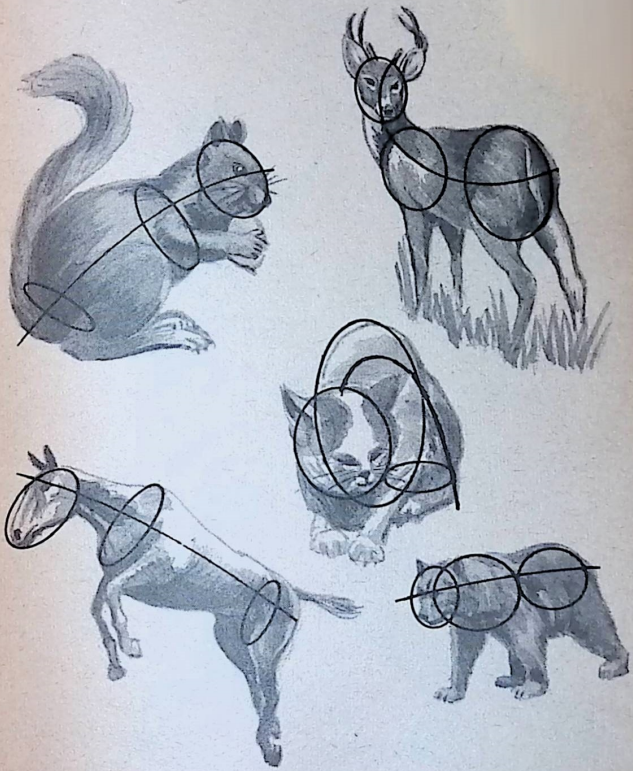




The exercises on this page and the following one are designed to help develop awareness of form, to aid you in seeking out the cylindrical and oval forms that are in all animals. Since you can draw cylinders and ovals, you can draw all animals by adding those features which identify them. Animals' bodies may expand or contract so that their basic cylindrical forms are no longer easily perceptible. In

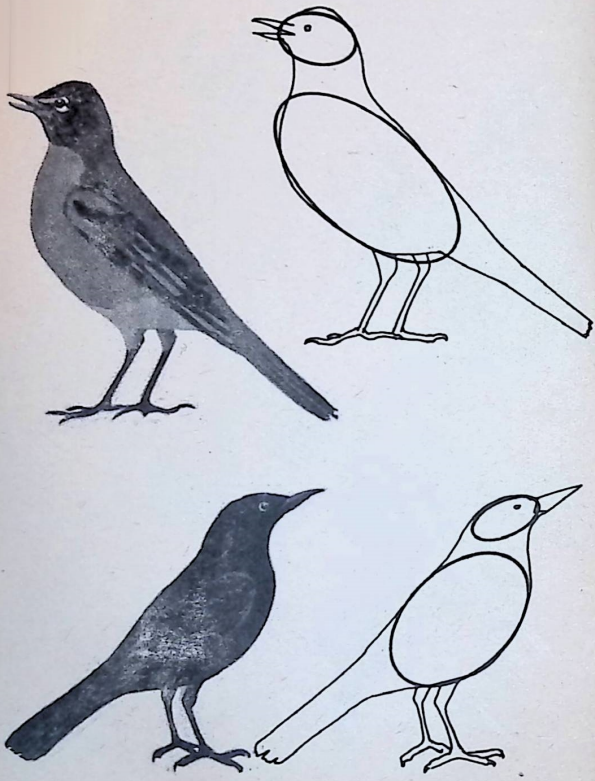


that case, begin your drawing with the oval for the head placed in position, and in relation to a form that will represent the rest of the torso. The shape of this combined body form is the first thing to be determined. Here, your previous training in awareness of form will be a great help. Use newspaper and magazine clippings for further practice.

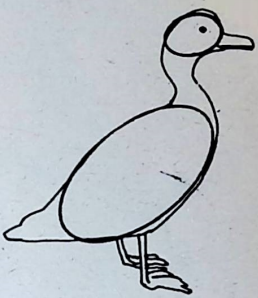


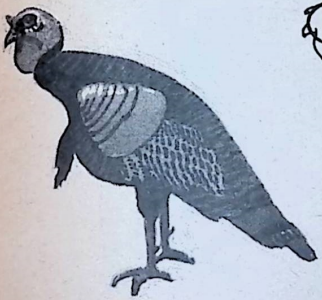
BIRDS

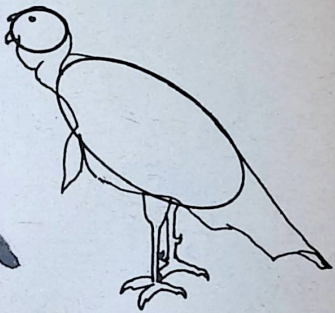
Awareness of form is easy to achieve in birds because their structure suggests the way to sketch them. The bird's head and body are simply two ovals, the larger one for the body.



How you place the head oval in relation to the body oval is important, and so is their relative proportion. To indicate the type of bird, it is important to record the type of beak and tail. Markings and the length of neck are also essential. Note that the direction of the lower legs is not always vertical.

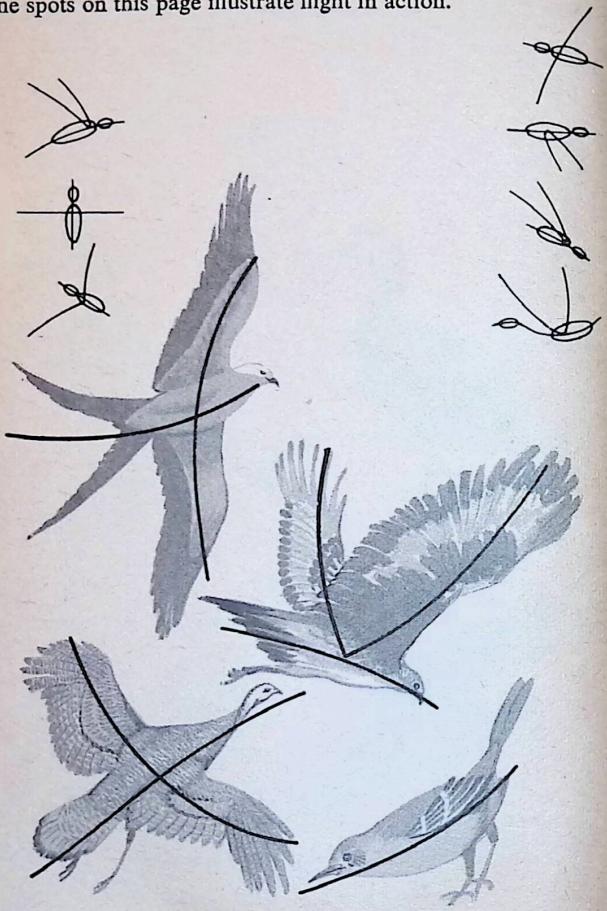




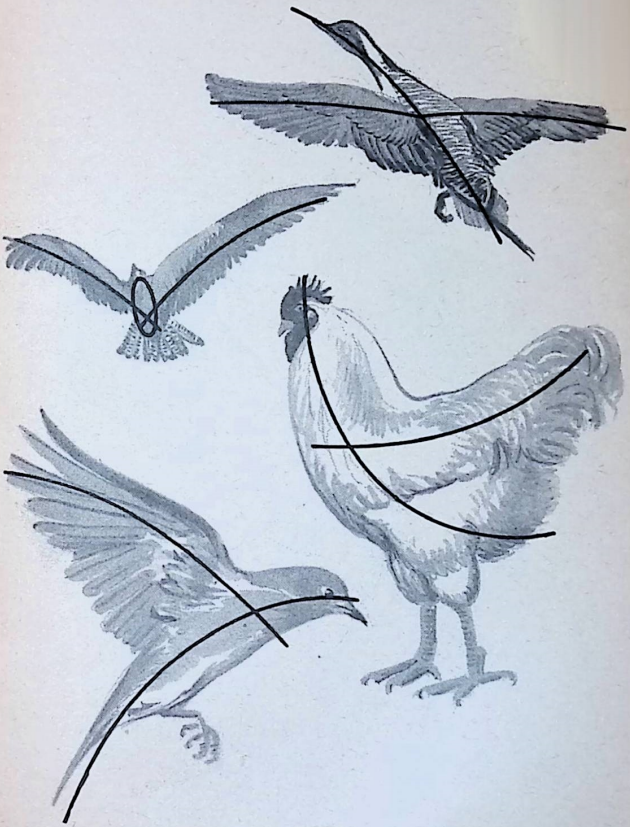


HOW TO LOOK AT BIRDS— —AND WHAT TO SEE

To sketch a bird in flight, draw the line of action running through the head and body (small and large ovals). Then draw a line of action for the wings, which should cross the large oval at its end nearest the small oval. The small line spots on this page illustrate flight in action.



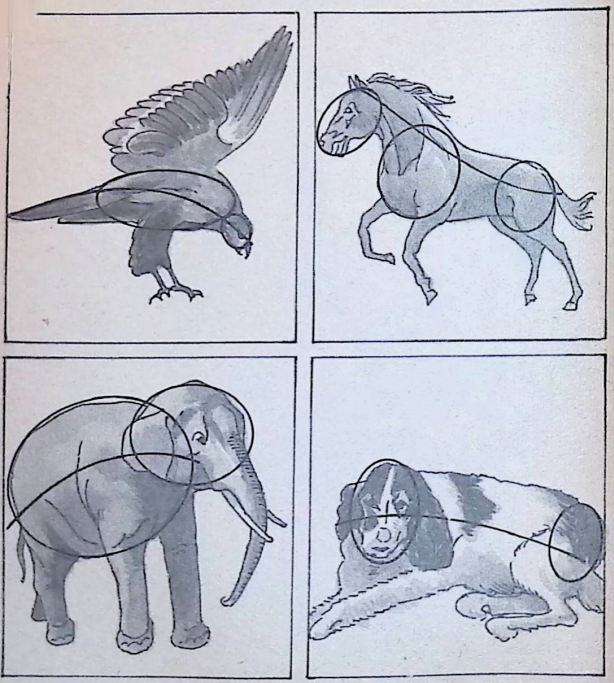
Some birds have long necks, others short ones. These features and the wingspread will help in sketching the type of bird. The wings are much longer than the body. Practice by carefully analyzing the pictures of birds. The pictures below demonstrate the method used.



EXERCISE FOR DRAWING ANIMALS AND BIRDS

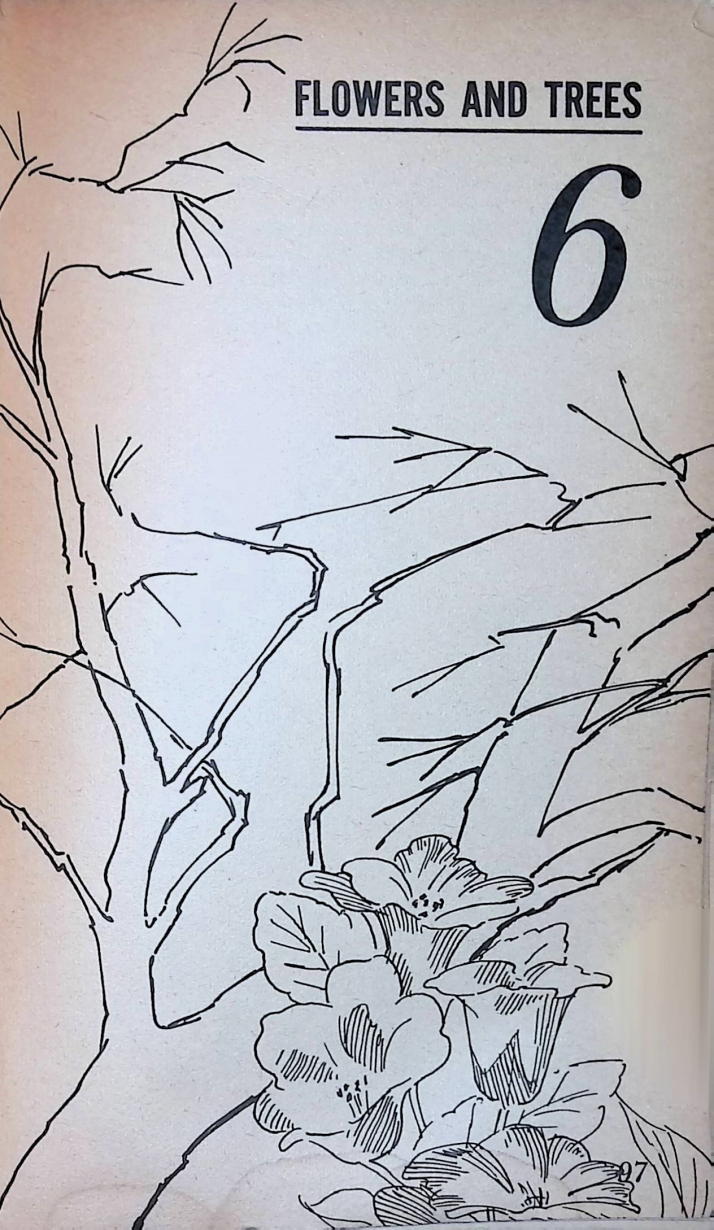
You will learn more about the forms of birds and animals by analyzing pictures. On the printed pictures, draw the line of body action and the ovals forming torso and head.

It will then be easier to indicate the direction of the wings or limbs. This exercise will develop your awareness of form so that when you begin to sketch from living objects you'll be off to a good start.

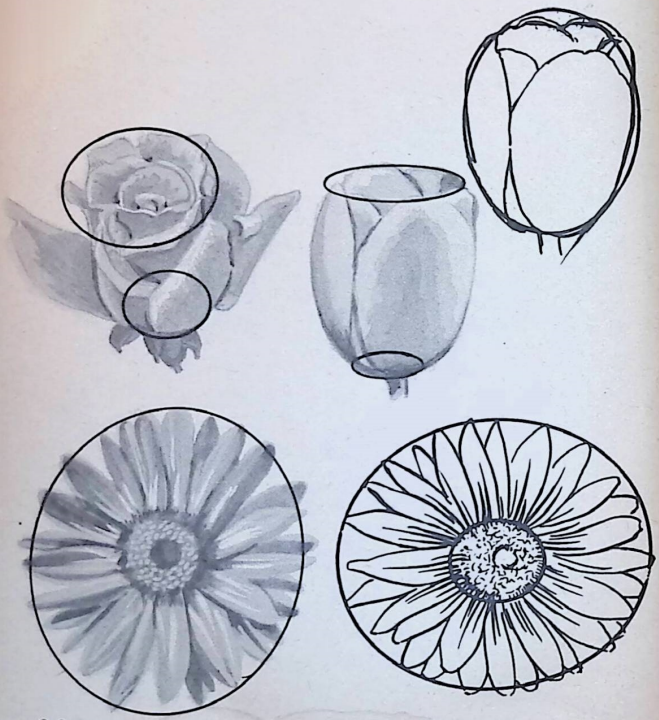


FLOWERS AND TREES

6

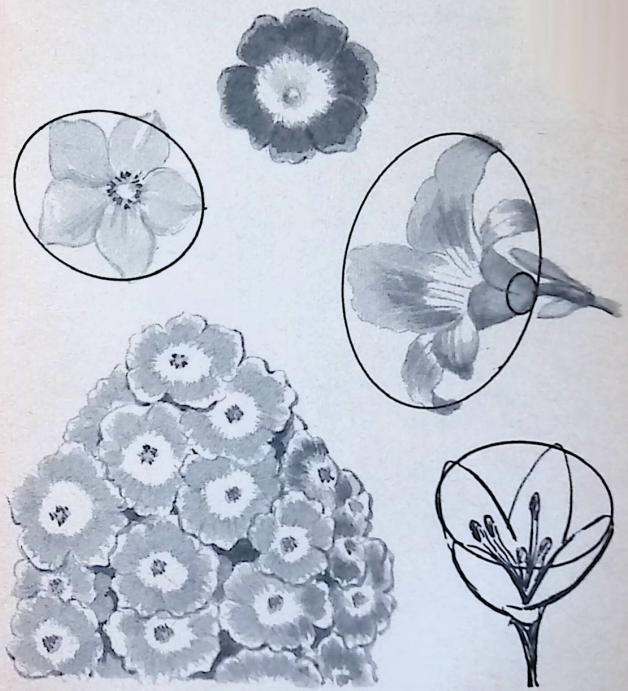


Flowers are beautiful and their contours subtle, but nature has followed a definite pattern which helps to solve the problem of drawing them. The individual blossom fits neatly into a circle which, in our analysis of cylindrical objects, means an oval. The length of the petals in any single blossom is uniform in such examples as carnations, asters, dianthus and a host of others, but no matter how irregular the petals, as

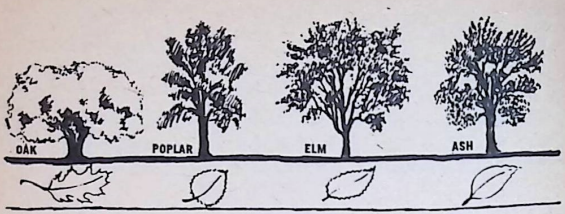


in the iris, for example, an oval will give the boundary of the complete blossom.

Such flowers as phlox, delphinium, lilac and others consist of arrangements of many individual blossoms. Start by drawing the general contour of the whole flower and then cover the enclosed surface with interlocking small ovals. Finally make each oval a blossom.



HOW TO DRAW TREES



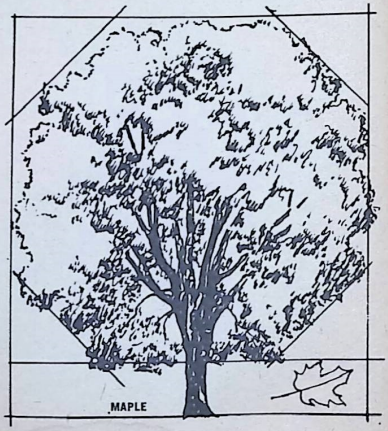
To draw a tree, observe its proportions, shape, and the character of its trunk and boughs. Set those down accurately and you will have recorded the type of tree.

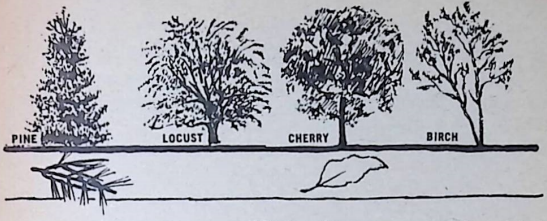
The maple tree below illustrates the procedure in drawing a tree.

1. Determine its overall proportion. Almost square, slightly taller than wide.

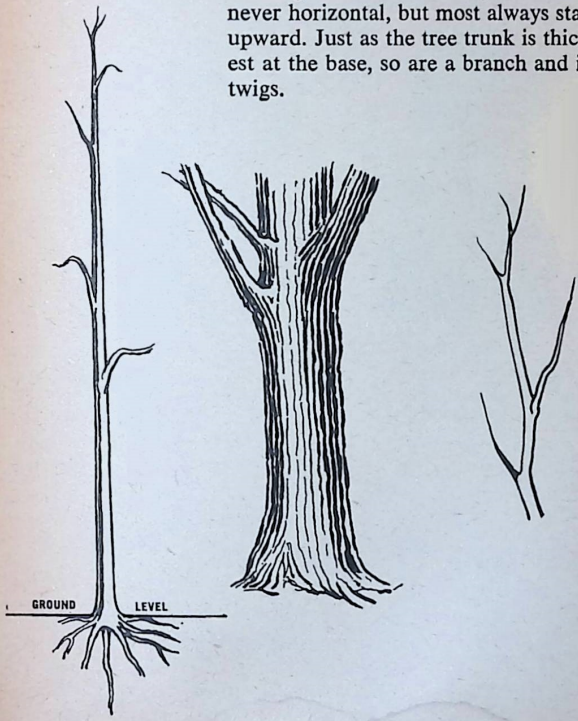
2. Define the proportion of the crown or leafy area, in this case octagonal.

3. Examine the trunk. Here, it is straight, as if a hand and forearm were raised, with the hand inside the bottom foliage line.



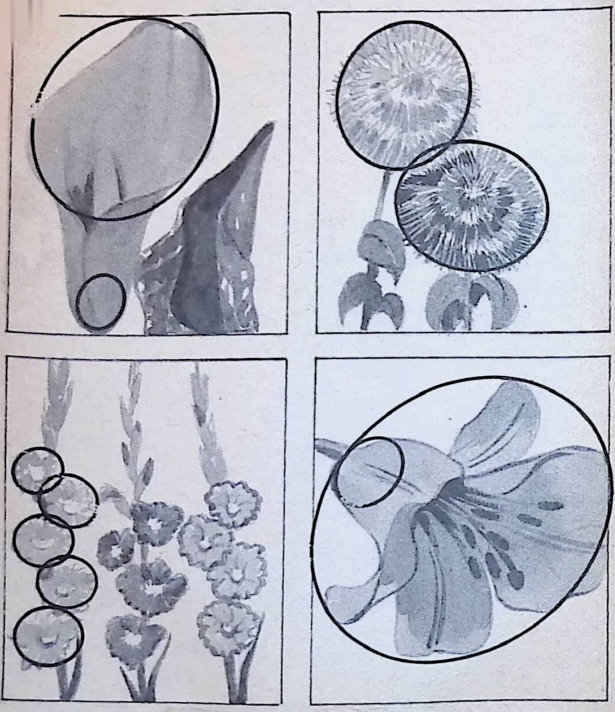


Note the grace with which a branch emerges from another branch, or bough from trunk. They are almost never horizontal, but most always start upward. Just as the tree trunk is thickest at the base, so are a branch and its twigs.



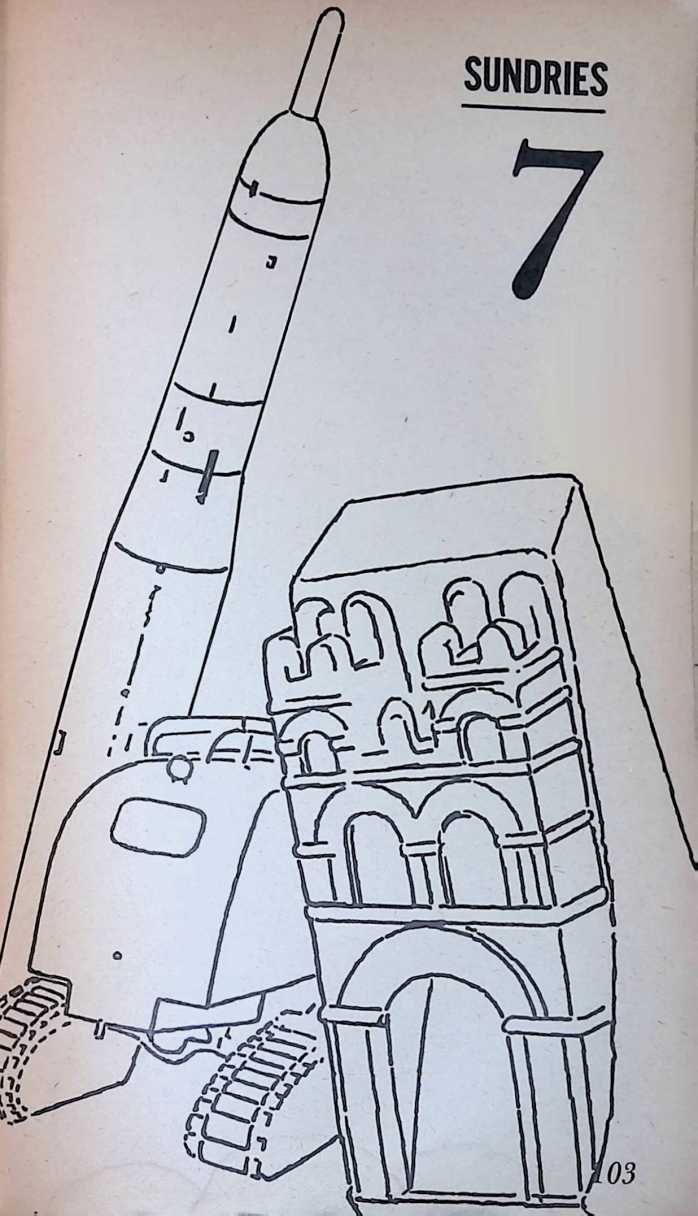
EXERCISE FOR DRAWING FLOWERS

This exercise helps to make you aware of the forms of flowers. Draw the oval contours of the flower structure on pictures of flowers clipped from seed catalogues. Flowers grow from a central core and spread as they open. But this process takes place within a circular boundary which appears as an oval except when seen from directly above. Examples are shown below.



SUNDRIES

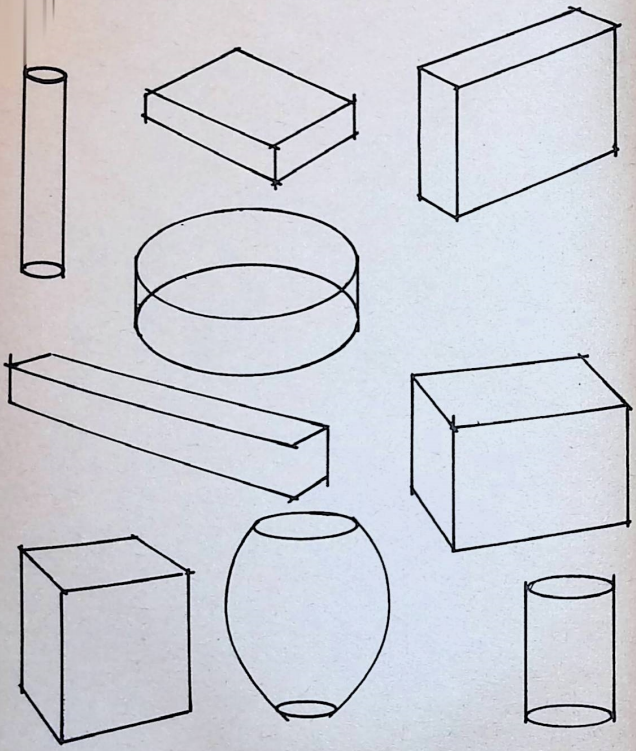
7



DRAWING AS A GAME

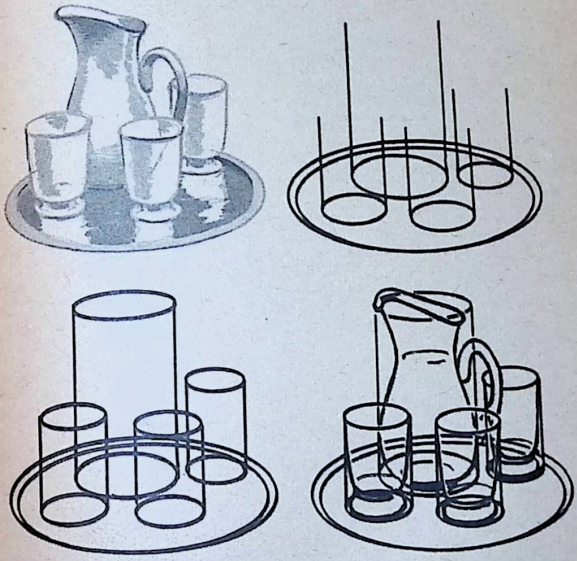
This page suggests a game—that may be played by any number of people of any age—which develops both imagination and memory.

The player who starts shows the drawing of a box or cylinder he has made which represents the basic structure of a picture he does *not* show. The other players are asked in turn, clockwise around the table, to add to the drawing (on a tracing sheet) any features that will complete the hidden picture. The one who comes closest to the original is the winner.



HOW TO FIT OBJECTS INTO A GROUP

The objects in the illustration below are all cylindrical and fit nicely on the tray. To do such a drawing, determine the required area of each object so that they all fit without overlapping. Substitute a cylinder for each object, whose proportions are taken from the height and widest diameter of its counterpart. Draw the tray and on it the base oval of each cylinder. Then draw a cylinder for each oval. Add the features to make each one look like the object it is supposed to represent.



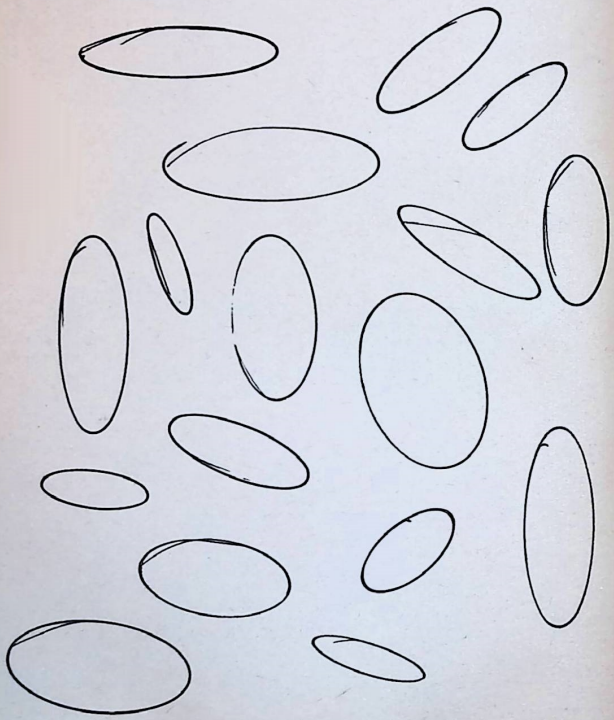
EXERCISE IN OVALS AND CYLINDERS

To make quick sketches of objects either in front of you or from memory, two things are necessary:

1. awareness of the object's form
2. ability to make fast firm pencil strokes

Concentrate more on the fast movement of your pencil than on the perfection of the ovals. The results will be swifter and more effective.

Draw ovals at random, of different sizes, and in different directions. Continue this exercise until you can make an oval as quickly and easily as you write the letter "O." Then do it some more.



Cylinders can be drawn in three ways (Figs. A, B, C), depending on the position intended for them. A general rule should be followed in using method "C," which applies when a cylinder is to be attached to another object. Always draw the oval which denotes the point of contact with another object *first*.

To avoid optical illusions put a little shading on the end area facing you and strengthen the lines as they approach the front.

Fig. A

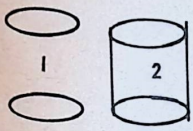


Fig. B

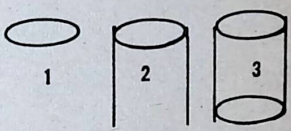
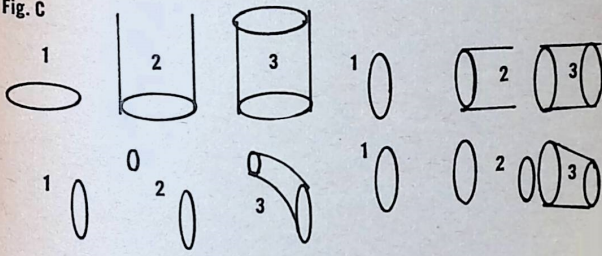
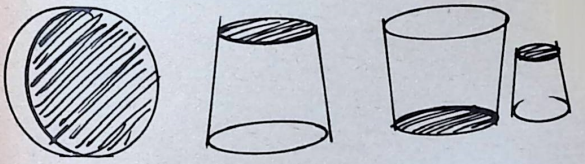
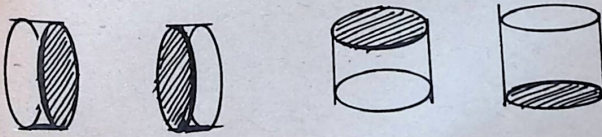


Fig. C





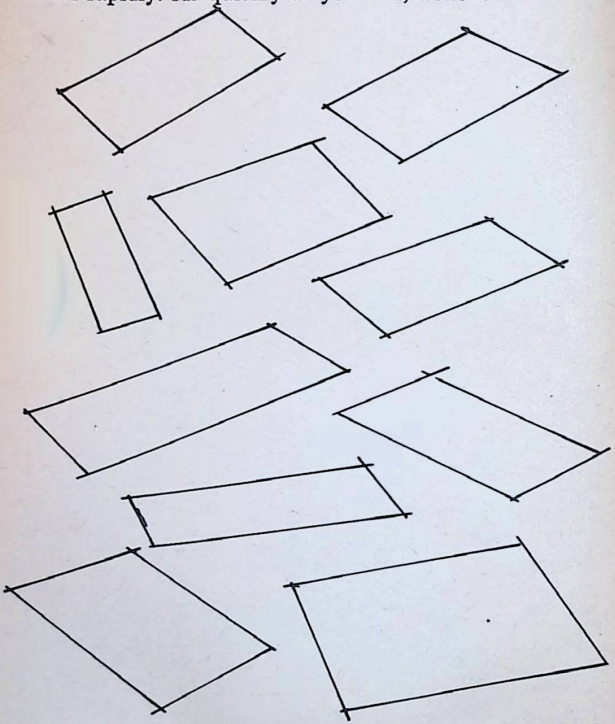


EXERCISE IN DRAWING RECTANGLES AND BOXES

To draw a non-objective box, start by making the rectangle that forms the top of the box. Don't try drawing boxes until you have mastered the rectangle. The box is correctly drawn when the front center corner is lower than both the left and right corners.

Remember how easy it is to draw the cross lines for Tic-Tac-Toe? Drawing a rectangle is just as simple. Get the hang of it. Two parallel lines crossing two others. One set comes down from the left, the other from the right, to form the rectangle.

With this in mind, practice drawing rectangles of different sizes—shallow, deep, long or short—and learn to do them rapidly. As quickly as you can, write 444.



Boxes can be drawn in three different ways (Figs. A, B, C), depending on the position intended for them. For methods "B" and "C," where the boxes are attached to other objects, the exact position is important and can be assured by drawing *first* the rectangle that denotes the point of contact with the other object.

To avoid optical illusions, add a light tone to the front of the box, and darker tone to the side.

Fig. A

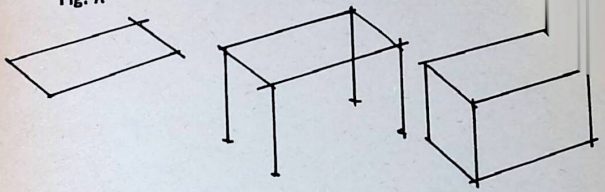


Fig. B

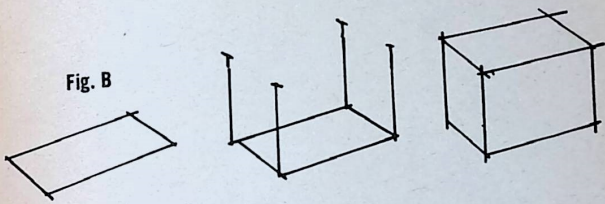
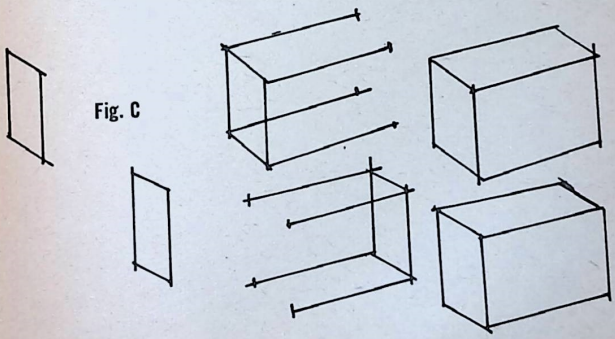


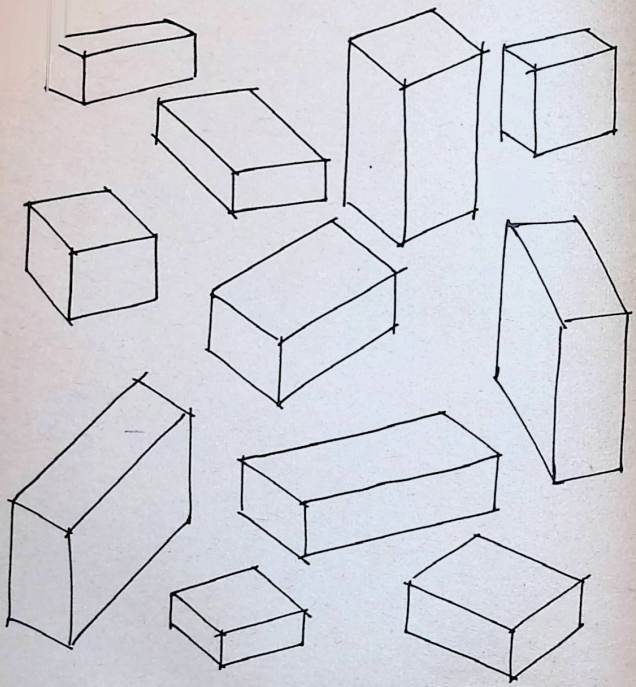
Fig. C



AN EXERCISE IN DRAWING BOXES AND THEIR CONVERSION INTO PRODUCTS

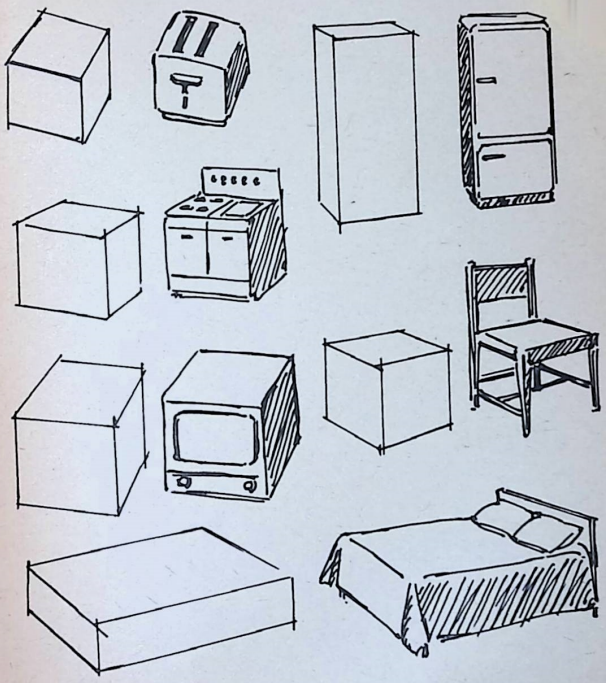
Practice drawing a plain box until you can draw it as easily and confidently as writing your name. Doing so is simply a matter of remembering a few rules, the most important of which is: *the vertical lines which represent the corners of the box should be of the same length, or nearly so.*

By "nearly so" is meant that the center vertical line may be slightly longer than the left and right lines. But bear in



mind that in conversational drawing, one can take the liberty of making all three vertical lines *equal* in length. That will insure no excessive distortion in your quick sketches.

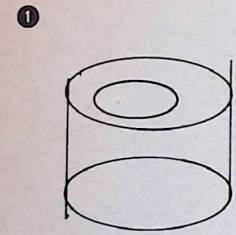
A good idea when drawing a box is to have some specific object in mind. This forces you to consider the proportion. Think of a cigar box, refrigerator, filing cabinet, kitchen table, shoe box, television set, etc.

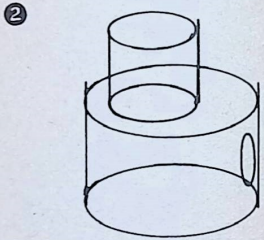


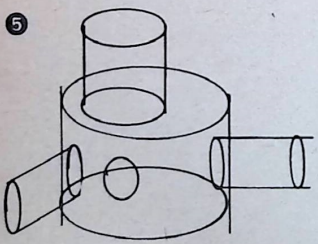
THERAPY: WRITING PICTURES FOR REHABILITATION

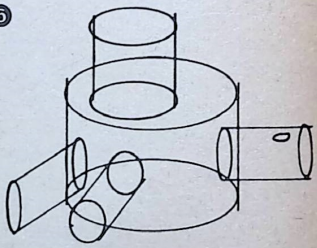
Because the primary use of writing pictures is to convey a message, it is an important aid to the bedridden. When shown that the box and cylinder are easily drawn and attached to each other, patients are often amused by the possible combinations. Their interest is especially stimulated when the combinations remind them of particular objects.

The patient then discovers he can draw things that



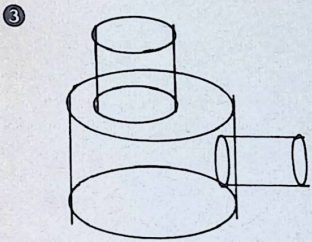


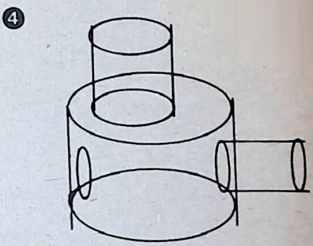


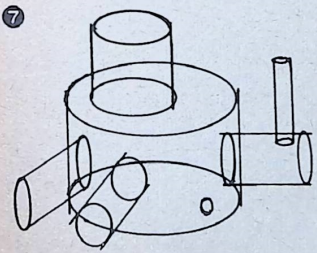


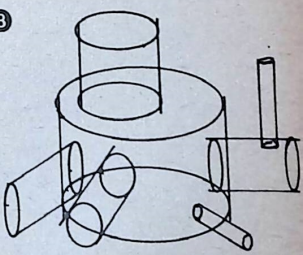
come to his mind, and he has thereby discovered a healthy pastime which relaxes him and helps him to recover.

These pages demonstrate the use of cylinders only. Any hospital personnel can be taught the method in a few short lessons. Illustration No. 1 shows a large cylinder with the base oval of a cylinder about to be added. No. 2 shows the completion of the second cylinder and the start of a third. This process of adding cylinders continues to the completion of No. 8 .



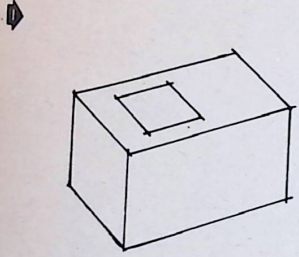


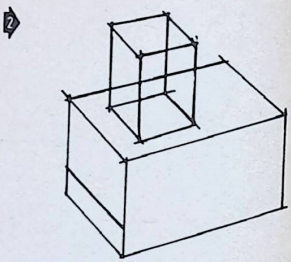


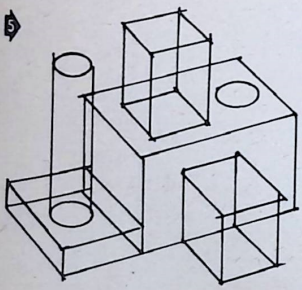


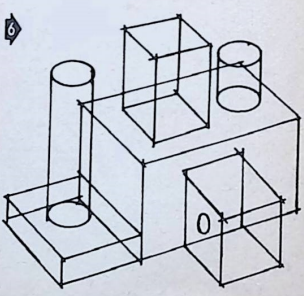
CONTINUATION OF WRITING PICTURES FOR THERAPY

This page shows how boxes and combinations of boxes and cylinders may be used. Since time moves slowly for the bedridden, any patient who has the use of his hands will accept such drawing readily. However, even if the patient himself should

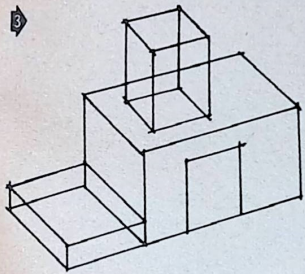


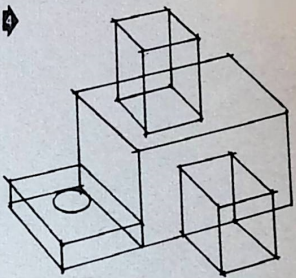


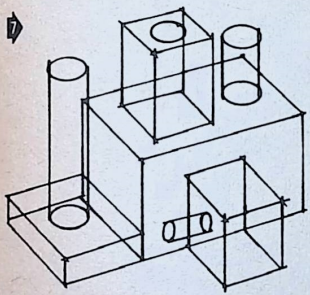


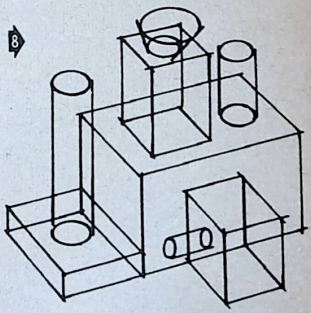


be denied active participation because he cannot use his hands, he can be entertained by watching the sudden appearance of cylinders and boxes in various kinds of objects drawn by someone else—a kind of pulling rabbits out of hats.





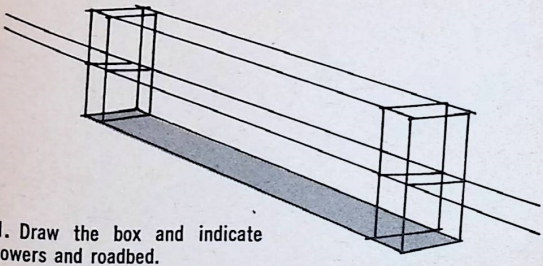




The search for cylinder and box formations develops awareness of form. And awareness of form leads ultimately to quick inspirations in drawing objects whose basic form is not obvious. One such example is a bridge. The two towers and level roadway resemble a box, but one which would have its base at the bottom of the towers. Judgments must be made about proportions, subdivisions, and finally, characteristic features. The step-by-step routine is the same as in all drawings of boxes.

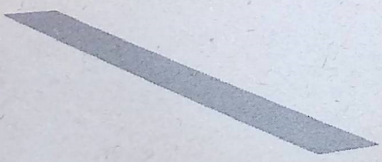
TO DRAW A BRIDGE—

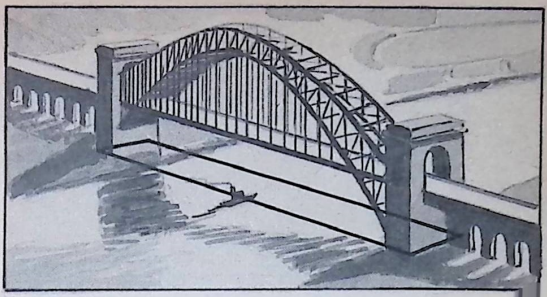
First become **AWARE OF ITS FORM**
—it's a long, low, narrow BOX.

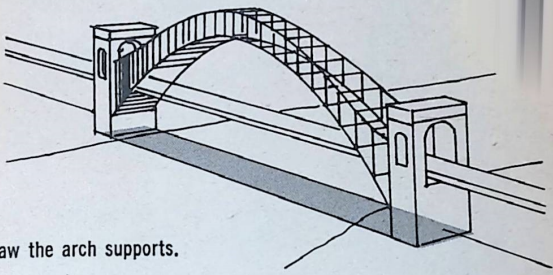


1. Draw the box and indicate towers and roadbed.

2. Find the center of the bridge and draw the suspension curve (deciding its height first) which reaches from tower to tower.

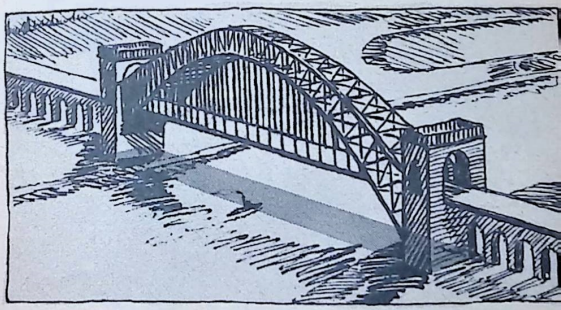






3. Draw the arch supports.

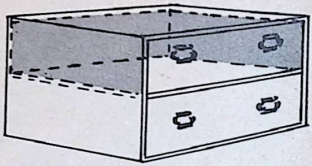
4. Fill in the other details and add some shading.

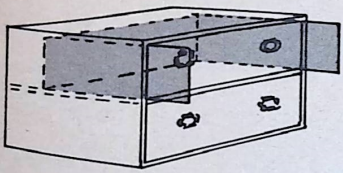


HOW TO PULL OPEN A DRAWER

To sketch a pulled-open drawer you must be aware of the drawer's outline within the closed cabinet. You must also know the rear construction of the cabinet, which is a box.

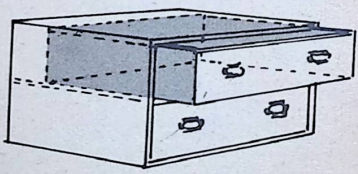
1. The dotted line indicates the position of the closed drawer.





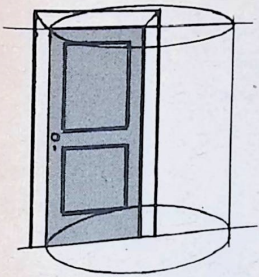
2. Extend top and bottom horizontal lines of both sides of the drawer to the desired length, and draw the vertical lines denoting the new position.

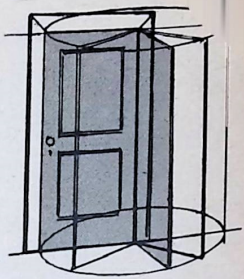
3. Complete the new horizontal lines of the drawer front and add the handles.



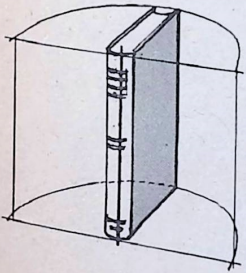
HOW TO OPEN A DOOR—AND A BOOK

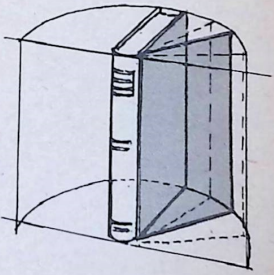
Think of the hinge end of the door or book cover as a pole. At the top and bottom of that pole draw the same size narrow ovals with the pole as the center. The long axis of the oval must be double the width of the door, or cover. The depth of the oval depends on the depth of the perspective in which the door or book is placed. What you are doing is creating a cylinder.





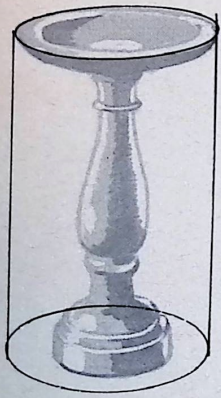
A vertical line anywhere along the vertical face of the cylinder forms the front edge of the door or book cover. The lines that join the top and bottom of the front edge to the respective center points complete the drawing.

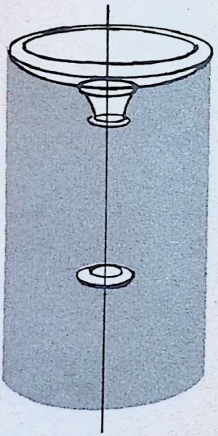




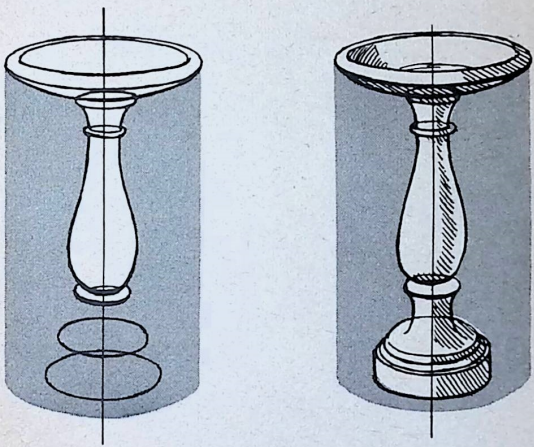
WHEN TO USE A GHOST CYLINDER

Bird baths, pie-crust tables or cylindrical objects like tier tables all present a problem that has a simple solution if you use an imaginary cylinder to encase the object. Keeping the base of the bird bath or the table legs in their proper place is done by holding them within the base of the cylin-

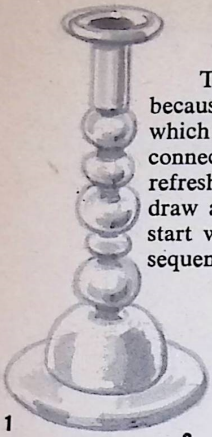




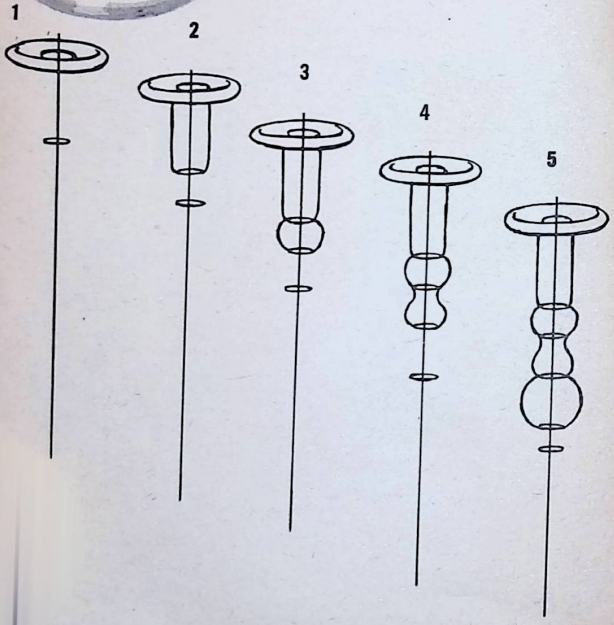
der. By using the widest diameter of the object—in this case the top of the bird bath—and the height, you build an imaginary cylinder. A vertical line down the center of the cylinder serves to keep all the units of the center post in their proper positions.



THE CANDLESTICK PROBLEM

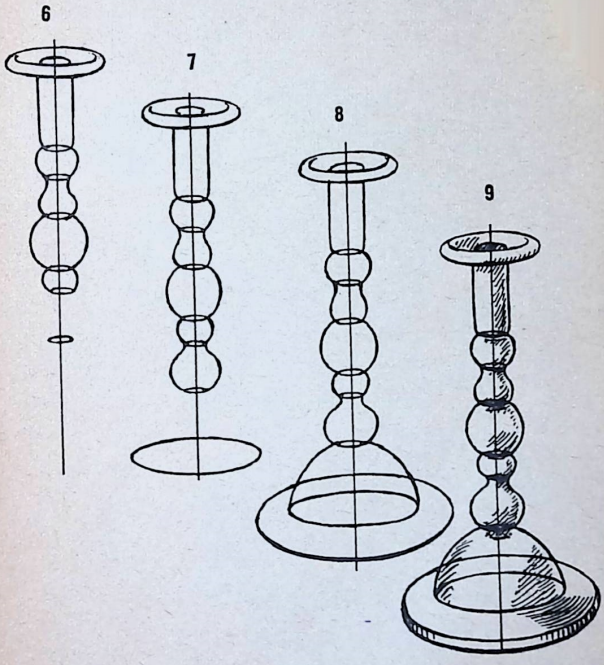


This candlestick can be drawn easily because it consists of individual units each of which can be drawn by using two ovals and connecting them with two curved lines. To refresh your memory, refer to page 26. First draw a center line as a vertical guide; then start with the top unit and add the rest in sequence.

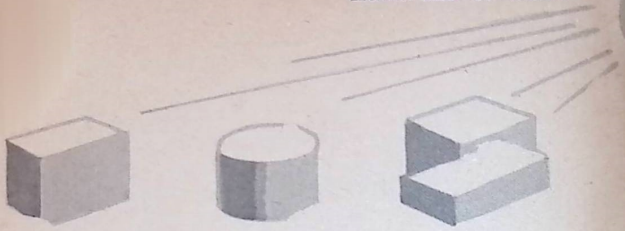


After completing the top unit, draw the ovals for the unit that comes next, complete it, and then continue down to the base.

This same type of problem occurs in such other objects as table legs, newel posts, etc. It is not difficult to solve. Once you master the method, a little practice will speed up the process.

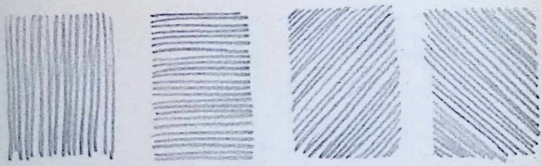


EXAMPLES OF LIGHT

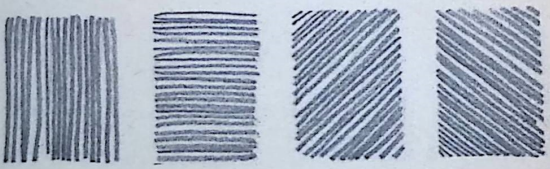


Adding light and shade values to your sketches helps in their interpretation. Put the tones in with loose sketch lines confined to the areas involved. Try not to overlap adjoining areas.

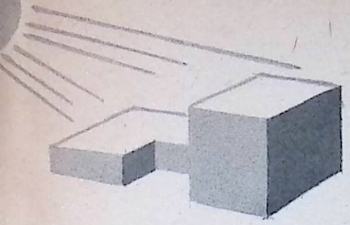
On flat planes, hold the strokes fairly even in spacing and value. On rounded surfaces, make the strokes a little lighter as the surface approaches the source of light. This simple handling of tonal values is all that is required for communication drawings.

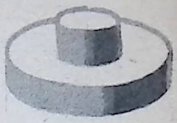


VALUE FOR LIGHT SIDE

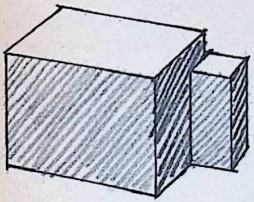


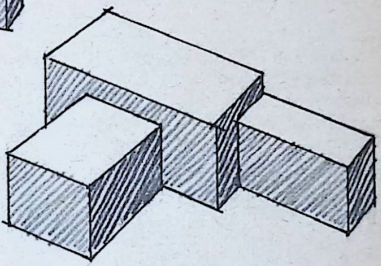
VALUE FOR DARK SIDE

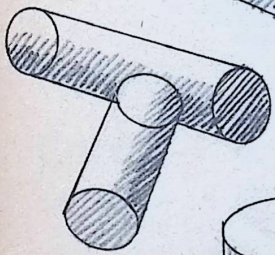


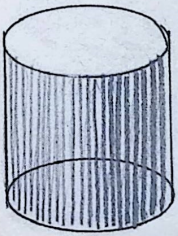


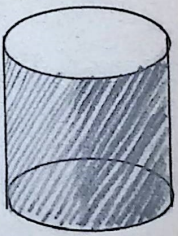
When shading a drawing, keep the strokes going in one direction. Changing direction tends to confuse. Use a simple rule: leave the top surface white; put light tones on the front, dark tones on the side.









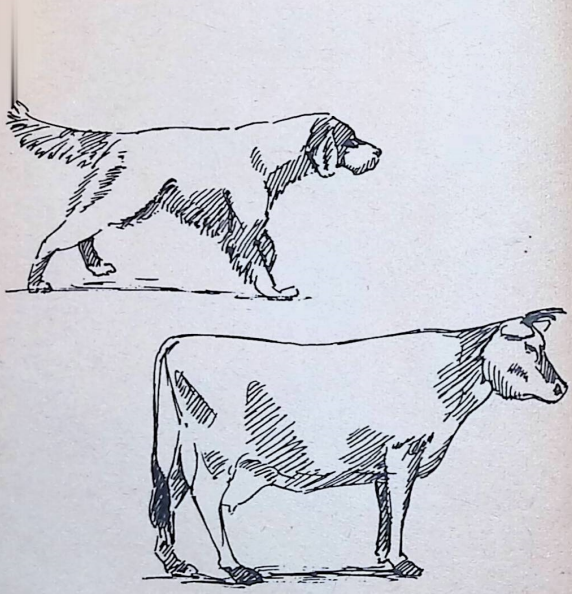


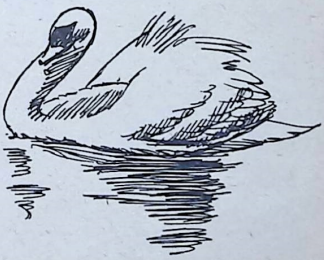
LIGHT AND SHADE (continued)

The use of light and shade is recommended to assist in explaining the forms in the drawing and in eliminating possible optical illusions created by construction lines.

Natural objects sketched on these two pages are unique because they have no sharply defined inside contours, which makes it difficult to determine where the light stops and dark begins. The simplest method is to put in the darkest area first, then gradually reduce the dark tones as you near the light area.

If you examine these drawings, you will note that the darkest values are used on surfaces that receive no light, including those underneath. Use loose, free strokes and follow the contour of the area in the shadow.





CONCLUSION

This book has taught a method of drawing quite different from the usual pattern of art instruction. Our method creates in you an awareness of the form inherent in all objects and teaches you how to apply that awareness to drawing pictures. You see an object and you are simultaneously aware of its resemblance to a cylinder or a box; it's like meeting old friends in every object you draw.

You also have the basic tools to work with—ability to write and awareness of form. The progress you make in drawing will depend on how much time you spend in practicing the exercises. The exercises are simple and results are automatic and astonishing.

And perhaps your experience with this method, and the pleasures of having learned conversational drawing, will lead you to a further study of art. If so, there are many good schools to take you further along the path you have now begun.

Good luck and have fun!

Edward Freedman proves that YOU CAN DRAW!

If you know how to write, Edward H. Freedman can teach you how to draw thousands of recognizable objects immediately, without preparation or practice.

●

He will show you that almost anything becomes easy to draw when you have an awareness of its form.

●

He will teach you how to use two simple shapes—the cylinder and the box—to make drawings of everything from cars and houses to animals, birds, and the human face and figure!

IT'S AS EASY AS WRITING WITH HOW TO DRAW